

## तालचेर फर्टिलाइजर्स लिमिटेड **Talcher Fertilizers Limited**

[Erstwhile Rashtriva Coal Gas Fertilizers Limited] निगमित पहचान क्रमांक / Corporate Identification Number (CIN): U24120OR2015PLC019575

TFL/Talcher/ADGF/06/2025/409

26.06.2025

The Additional Director General of Forests (C), Ministry of Environment, Forests and Climate Change, Regional Office (EZ), A/3 Chandersekharpur, Bhubaneswar-751023 Odisha.

Submission of six-monthly compliance report pertaining to M/S Talcher Fertilizers Ltd. for setting up Ammonia & Urea Fertilizer Plant at Village-Vikrampur, Tahsil-Talcher, District-Angul, Odisha.

File No. J-11011/231/2013-IA-II(I), MoEF&CC (IA-II Section) Environmental Clearance dated 09.02.2018

Dear Sir.

Reference to the above subject, we have obtained Environmental Clearance on 09.02.2018 vide reference cited. To comply certain conditions of the said EC, we herewith submitting half yearly compliance report of the conditions imposed in the said EC issued for the said project for the period of November, 2024 to April, 2025.

We request you to acknowledge the receipt of the same.

Thanking you,

Yours faithfully,

D.P. Biswajit Manager,

Manager (Instrumentatio Palcher Fertilizers Limited Li Talcher Fertilizers Limited Talcher, Odisha

Copy to:

1. Member Secretary, Odisha Pollution Control Board, Paribesh Bhawan, A/118, Nilakantha Nagar, Unit - VII, Bhubaneswar - 751012 (Odisha).

2. Zonal Office, CPCB, Kolkata.

3. Regional Office, OSPCB, Angul S-3/3, Industrial Estate, Angul-759143, Odisha.

### SIX-MONTHS COMPLIANCE STATUS REPORT November 2024—April- 2025

# TALCHER FERTILIZERS LIMITED VILLAGE - VIKRAMPUR THESIL-TALCHER DISTRICT-ANGUL, ODISHA

Nitya Laboratories Building and Road, Material, Soil, Environmental and Calibration Lab

An ISO: 9001:2015, ISO: 14001:2015 & OHAS: 18001:2007 Certified Company
(Accredited By NABL, MoEF & CC Recognised)

#### Corporate Office & Multi Labs

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#### INTRODUCTION ABOUT THE INDUSTRY

In 1971The Fertilizer Corporation of India Ltd.(FCIL),set up Talcher Unit overran area of 902 acre in the district of Angul, Odisha which is located about 126 km away from Bhubaneswar to produce urea using coal as feed stock. Licensor for the Coal gasification was M/s Krupp Koppers, Germany and for Ammonia and Urea units Ammonia synthesis, M/s Tecnimont, Italy.

Commercial Production of Ammonia and Urea commenced on 01.11.1980 with Ammonia and Urea production capacity of 900 and 1500 Tons per day respectively. However due to frequent power restriction, obsolete and mismatch of technology and precarious steam balance the plant could not be sustained. The Board for Industrial and Financial Reconstruction (BIFR) declared the FCIL sick in 1992 and in 2002 Government of India initiated actions to close the company.

Due to shortage of domestic Urea and availability of large land banks, infrastructure and tied-up rail, water & electricity in the units of FCIL, GoI in the year 2007 decided to revive all units of FCIL. Government of India approved Policy for new Investments in the Urea Sector in September 2008 and constituted Empowered Committee of Secretaries (ECOS) in October 2008 with the mandate to evaluate all options of revival of closed units of FCIL/HFCL and to make suitable recommendations for consideration of the Government. In August, 2011, the Cabinet Committee on Economic Affairs (CCEA) had approved the Draft Rehabilitation Scheme (DRS) for revival of all the Units of FCIL and HFCL. DRS envisaged revival of Talcher Unit by the consortium of M/s. Rashtriya Chemical & Fertilizers Limited (RCF), M/s Coal India Limited (CIL) and M/s GAIL (India) Ltd. (GAIL).



#### Project-Talcher Fertilizers Limited, Talcher, Odisha. ECLetterNo.-F.No.J-11011/231/2013-IA-II(I) dated 9<sup>th</sup> February, 2018

#### A. STATUTORY COMPLIANCE:

S.No.	Conditions	Compliance
1	In view of the baseline air quality data for PM10 already exceeding the prescribed standards, one more season data to be collected to confirm the consistency of readings/values, and for suggesting Mitigating measures accordingly.	<ul> <li>Monitoring of PM10 has been completed for the period November 2024 to April 2025.</li> <li>Copy of the same is enclosed in this report.</li> </ul>
2	The project proponent shall, take stringent mitigating measures to minimize the incremental concentration of air pollutants (Mainly PM10& PM2.5) to the extent possible due to the proposed industrial operations.	As the monitored results are well within the specified limits no additional measures are proposed to be installed.
3	The project proponent shall develop local air quality management plan in consultation with SPCB and implemented to achieve desired standards.	Compliance Assured
4	The incremental ground level concentrations (GLCs) for PM10, PM2.5, SO2 & NO2 due to the increased vehicular and Other allied/ developmental activities, shall be analyzed and reported for actual impact of the project, besides remedial measures.	Compliance Assured     To check the incremental increase in air pollutant during construction phase, two monitoring stations were selected in the project site. The data is included in this report.     As indicated in EIA the major transport of raw material will be by conveyor and hence no impact on GLC due to transport is expected.
5	Consent to Establish /Operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.	Consent to Establish (CTE) is obtained from the Office of the State Pollution Control Board, Odisha, vide No.12951/IND-II-NOC-6253 dated:30.11.2019.The same enclosed as Annexure-II
6	As already committed by the project proponent, Zero Liquid Discharge shall been sured and no waste/treated water shall be discharged outside the premises.	Feasibility study for ZLD will be undertaken and appropriate treatment / recycling method will be selected to achieve ZLD.
7	Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016, Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.	Compliance Assured .It will be obtained in consent to operate.
8	National Emission Standards for Organic Chemicals Manufacturing industry issued by the Ministry vide G,S,R, 608(E) dated 21st July, 2010 and amended from time to time shall be followed.	Compliance Assured.
9	To control source suitable pollution and the control Fugitive emissions, devices shall be installed to meet the prescribed norms and/or the NMQS. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.	technologies with inbuilt pollution control systems so that the prescribed norms and fugitive





10	Total fresh water requirement shall not exceed 49200cum/day to be met from surface water from	
	Brahmini River. Prior permission in this regard shall be obtained from the concerned regulatory authority.	<ul> <li>And all necessary permissions will be ensured prior to installation of the project.</li> </ul>
11	Process effluent/any wastewater shall not be allowed to mix with storm water. Storm water drain shall be passed through guard pond.	Compliance Assured.
12	Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc., Flame arresters shall be provided on tank farm and solvent transfer through pumps.	Compliance Assured.
13	ETP sludge, process inorganic & evaporation salt, if any, shall be disposed of to the TSDF.	Compliance Assured.
14	The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and imports of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.	Compliance Assured.
15	The company shall undertake waste mini mization measures as below:  a) Metering and control of quantities of active ingredients to minimize waste.	Compliance Assured.
	<ul> <li>b) Re use of by-products from the process as raw materials or as raw material substitutes in other processes.</li> <li>c) Use of automated filling to minimize</li> </ul>	Compliance Assured.  Compliance Assured.
	spillage d) Use of Close Feed system into batch reactors.	Compliance Assured.
	e) Venting equipment through vapour recovery system. f) Use of high-pressure hoses for	Compliance Assured.  Compliance Assured.
	<li>f) Use of high-pressure hoses for equipment.</li>	Compilance Assured.
16	The green belt of 5-10m width shall be developed in more than 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.	The project activities will be implemented in existing site of TFL with lot of greenery and the guideline of 33% area under green belt out of total project area will be achieved.
17	All the commitment made regarding issues raised during the Public Hearing/consultation meeting held on 30h August, 2017 shall be satisfactorily implemented.	CSR dept. will keep aside a sum for CSR activities for project to meet public hearing requirement to the practical extent possible for an industrial unit.
18	At least 2.5% of the total project cost shall be allocated for Enterprise Social Commitment based on Public Hearing issues and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.	Compliance Assured.



19	For the DG sets, emission limits and the stack height shall be in conformity with the extant regulation sand the CPCB guidelines, Acoustic enclosure shall be provided to DG set for controlling the noise pollution,	Compliance Assured.
20	The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Firefighting system shall be as per the norms.	Compliance Assured.
21	Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.	HR and OHC Dept. will conduct regular health checkups and records for the same will be maintained as per the Factories Act.
22	Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.	Compliance Assured.



#### COMPLIANCE OF OTHER GENERIC CONDITIONS

1	The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board, Central Pollution Control Board, State Government and any other statutory authority.	Compliance Assured.
2	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forest and Climate Change. In case of deviations or alterations in the project proposal from those submitted to this Ministry for clearance, a fresh reference shall be made to the Ministry to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.	Compliance Assured.
3	The locations of ambient air quality monitoring stations shall be decided in consultation with the State Pollution Control Board (SPCB) and its hall be ensured that at least one station each is Installed in the upwind and downwind direction as well as where maximum ground level concentrations are anticipated.	Compliance Assured.
4	The National Ambient Air Quality Emission Standards issued by the Ministry vide G,S.R. No. 826(E) dated 16th November, 2009 shall be followed,	Compliance Assured.
5	The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under Environment (Protection) Act,1986 Rules, 1989 viz. 75 dBA (daytime) and 70 dBA (night time).	Compliance Assured.
6	The Company shall harvest rainwater from the roof tops of the buildings and storm water drains to recharge the ground water and use the same water for the process activities of the project to conserve fresh water.	Compliance Assured.
7	Training shall be imparted to all employees on safety and health aspects of chemicals handling. Pre-employment and routine periodical medical examinations for all employees shall be under taken on regular basis. Training to all employees on handling of chemicals shall be imparted.	



8	The company shall also comply with all the environmental protection measures and safe guards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.	
9	The company shall undertake all relevant measures for improving the socioeconomic conditions of the surrounding area. ESC activities shall be undertaken by involving local villages and administration.	local and other stake holders.
10	The company shall under take eco developmental measures including community well fare measures in the project area for the overall improvement of the environment.	Greenery development in the area will be undertaken. Activities shall be under taken for Developmental measures for welfare of overall environment.
11	The company shall earmark sufficient funds towards capital cost and recurring cost per annum to implement the conditions stipulated by the Ministry of Environment, Forest and Climate Change as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so earmarked for environment management pollution control measures shall not be diverted for any other purpose,	
12	A copy of the clearance letter shall be sent by the project proponent to concerned Panchayat, Zilla Parishad /Municipal Corporation, Urban local Body and the local NG0,if any, from whom suggestions/ representations, if any, were received whil processing the proposal.	Complied.
13	The project proponent shall also submit six monthly reports on the status of compliance of the stipulated Environmental Clearance conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF & CC, the respective Zonal Office of CPCB and SPCB. A copy of Environmental Clearance and sixmonthly compliance status report shall be posted on the website of the company.	
14	The environmental statement for each financial year ending 31st March in Form-Vas is mandated shall be submitted to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental clearance conditions and shall also be sent to the respective Regional Offices of MoEF & CC by e- mail	commercial production.



15	The project proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB/Committee and may also be seen at WebsiteoftheMinistryathttp://moef.nic.in.This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local, news papers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the concerned Regional Office of the Ministry.	Compliance done. Communicated on In local Odiya news paper and English news paper. Oriya on date 16.02.2018 in Samaj (Angul Edition) ii) English on date 15.02.2018 in New Indian Express (Bhubaneswar Edition)Copy of the same has been submitted already.
16	The project authorities shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of start of the project.	This will be complied with. Presently, the site preparation work is under progress.

# Baseline Monitoring Reports Result (November 2024 to April 2025)



#### 1.0 Air Quality Monitoring Report (November 2024-April- 2025)

The prime objective of ambient air quality monitoring is to evaluate the existing air quality of the proposed project area. This will also be useful for assessing the conformity to standards of the ambient air quality during the operations of proposed project. This section describes the selection of sampling locations, methodology adopted for sampling, analytical techniques and frequency of sampling Meteorological conditions prevailing within study area.

#### Sampling and Analytical Techniques

The sampling and analytical techniques used for the monitoring of Ambient Air quality is given in **Table –1.** 

TABLE-1: TECHNIQUES USED FOR AMBIENT AIR QUALITY MONITORING

S. No.	Parameter	Technique	Technical Protocol	Detectable Limit	
1	Particulate Matter size lessthan10μm(PM10), μg/m3	Gravimetric method	IS 5182 Part-23 : 2006(Reaff.2017)	5μg/m <sup>3</sup>	
Particulate Matter size lessthan2.5μm (PM2.5),μg/m3		Gravimetric method	EPA-40AppendixL To Part 50	5μg/m <sup>3</sup>	
3	Sulphur Dioxide(SO2), µg/m3	Improved Westand Gaeke	IS5182:Part 2:2001 (Reaff.2017)	5μg/m <sup>3</sup>	
4	Nitrogen Dioxide(NO2), Modified Jacob μg/m3 & Hochheiser		IS5182:Part 6:2006 (Reaff.2017)	5μg/m <sup>3</sup>	
5	Ammonia(NH3),μg/m3	GC FID	ABCTL/SOP/A05 Is. No.102-01-2015	0.1μg/m <sup>3</sup>	
6	VOCs	GC FID	U.S.EPA Method TO17: 1999	0.1μg/m <sup>3</sup>	
7	Methane Hydrocarbons (MHC)	HC Analyzer for Spot Concentration	ABCTL/SOP/A15 Is.No.102-01-2015	0.1μg/m <sup>3</sup>	
8	Non-Methane Hydrocarbons(NMHC)	HC Analyzer for Spot Concentration	ABCTL/SOP/A15 Is.No.102-01-2015	0.1μg/m <sup>3</sup>	



#### Frequency and Parameters

On each sampling day, 1 set of 24 hours / 8hour average samples was collected. The following air pollution parameters were measured by sampling during the sampling period.

- 1. Particulate matter (PM<sub>10</sub>)
- 2. Particulate matter (PM25)
- 3. Sulphur dioxide (SO2)
- 4. Oxides of nitrogen (NOx)
- 5. Ammonia
- 6. VOC

#### Sampling and Analytical Procedure

A brief description of the sampling and analytical procedures followed during the ambient air quality survey is as follows:

#### Particulate Matter (PM10)

The sampling of ambient air for evaluating  $PM_{10}$  levels were performed with AAQM Sampler fitted with a cyclone separator. Air exiting the separator is drawn at a measured rate through pre-weighed glass fiberfilter sheets of 20 cm x 25 cm sizes. The concentration of  $PM_{10}$  were computed from the average air flow rate, sampling period and the mass of particulate matter collected over the filter surface.

#### Particulate Matter (PM2.5)

 $PM_{2.5}$  is determined as per USEPA (United State Environment Protection Agency) guidelines with the help of Fine Dust Sampler (AAQM). Ambient air @ 16.67 lpm is allowed to pass through Louvered inlet and WINS Impactor assembly having a 37mm dia. filter paper. Particulate matter of size <2.5 microns is deposited on 46.2mm dia. PTFE filter. The difference of final weight and initial weight of filter paper gives the weight of particulate matter of size <2.5 microns. The concentration of  $PM_{2.5}$  is computed as the weight of dust deposited on the filter divided by volume of air sampled.

#### Sulphur Dioxide (SO<sub>2</sub>)

The sampling of ambient air for evaluating the gaseous pollutants were performed with a Multigas Sampler, using the vacuum created by the AAQM Sampler for drawing the air samples through the impingers. For SO<sub>2</sub>, air was drawn at a measured and controlled rate of 400 to 500 ml/min & passed through a solution of potassium tetrachloromercurate (TCM). After sampling, the absorbing reagent was treated with dilute solutions of sulfamic acid, formaldehyde and para-rosaniline hydrochloride. The absorbance of the intensely coloured para-rosaniline methyl sulphonic acid was measured at the wavelength of 560 nm using spectrophotometer and the amount of SO<sub>2</sub> in the sample was computed. The ambient SO<sub>2</sub> concentrations were computed from the amount of SO<sub>2</sub> collected and the volume of air sampled.

#### Oxides of Nitrogen (NO2)

Air was drawn at a measured and controlled rate of about 200 ml/minute through an orifice-tipped impinger containing solutions of sodium hydroxide and sodium arsenite. After completion of the sampling, an aliquot of the used absorbing solution was treated with solutions of H<sub>2</sub>O<sub>2</sub>, sulphanilamide and NEDA. The nitrite ion present in the impinger was calculated from the absorbance of the resulting solution measured at 540 nm using spectrophotometer. The ambient NOx concentrations were computed from the total nitrite ion present in the impingers, overall efficiency of the impinger and the procedure, and the volume of air sampled.

#### Ammonia (NH<sub>3</sub>)

The ambient air is collected through AAQM fitted with two Midget impingers containing 10 ml absorbing solution i.e. dilute Sulphuric acid in each (one for blank) at the rate of 1.0 l/min for a period of 10-15 minutes. Ammonium sulphate solution thus formed is treated with Nessler reagent to produce yellow-brown colour complex. The Ammonia concentration is determined by spectrophotometer at 440 nm and comparing it with a standard curve.

#### Results

The observations made on air quality parameters at 06 locations have been presented through Table-4 to 9. Minimum and maximum values, arithmetic mean values and 98th percentile values of the 24 hour / 8 hour average concentrations have also been computed and presented.



#### Selection of Sampling Locations:

The baseline status of the ambient air quality has been assessed through a scientifically designed ambient air quality monitoring network. The design of monitoring network in the air quality surveillance program has been based on the following considerations:

- · Topography/Terrain of the study area
- History of wind pattern
- Human Settlements
- Health status
- Accessibility of monitoring site
- Resource Availability
- Representativeness of the region for establishing baseline status
- Representativeness with respect to likely impact areas

Accordingly, an ambient air quality monitoring was conducted at 06 locations during the period of 1<sup>st</sup> November 2024 to 30<sup>th</sup> April 2025.

(November 2024 – April 2025). The location of ambient air sampling stations has been presented below in Table 2 & Table 3.

Table2: Details of sampling locations

S.No.	Location Name	With respect to project site				
1 2 3 4		Direction	Distance			
1	TFL Admin Building	-	-			
2	H.B. Colony	ENE	1.2 km			
3	TFL Guest House	-				
4	Balanda Village	NW	2.5km			
5	Karanapur Village	W	4.5km			
6	Kukudanga Village	SW	2.5km			

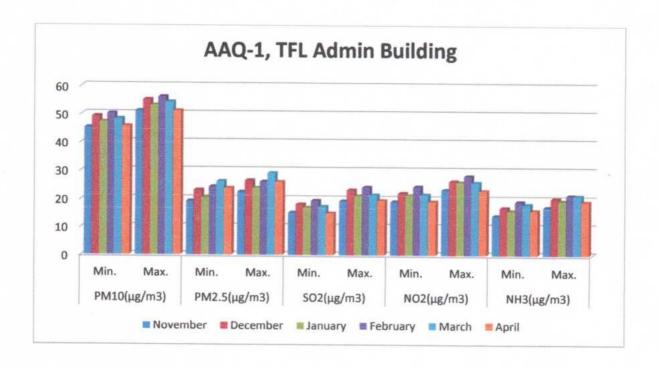
Table3: Details of Air Quality Monitoring Locations (November 2024 to April 2025)

S.No.	Sample Code	Sampling Locations	Geographical Locations				
1	TFL/A1	TFL Admin Building	20°54'42.8"N, 85°09'38.4"E				
2	TFL/A2	H.B Colony	20°54'19.3"N, 85°10'20.4"E				
3	TFL/A3	TFL Guest House	20°54'14.8"N, 85°09'56.9"E				
4	TFL/A4	Balanda Village	20055231 0"NL 85000226 8"E				
5	TFL/A5	Karanapur Village	20°54'26.4"N, 85°07'06.1"E				
6	TFL/A6	Kukudanga Village	20°53'23.3"N, 85°08'50.8"E				



**AAQ1-TFL Admin Building** 

Months	PM10(μg/m3)		PM2.5(μg/m3)		SO2(µg/m3)		NO2(μg/m3)		NH3(μg/m3)		VOC
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	(μg/m3)
November	45.20	51.20	19.20	22.50	15.20	19.30	19.10	23.30	14.20	17.20	0
December	49.20	55.20	23.10	26.50	18.12	23.20	22.10	26.30	17.00	20.27	0
January	47.20	53.20	20.60	23.90	17.00	21.20	21.40	26.00	16.00	19.50	0
February	50.20	56.20	24.30	26.10	19.50	24.20	24.40	28.20	19.20	21.40	0
March	48.30	54.40	26.20	29.10	17.40	21.50	21.60	25.90	18.20	21.30	0
April	45.70	51.20	23.80	26.00	15.00	19.50	19.20	23.00	16.00	19.20	0
NAAQ Standards	100		60		80		80		400		

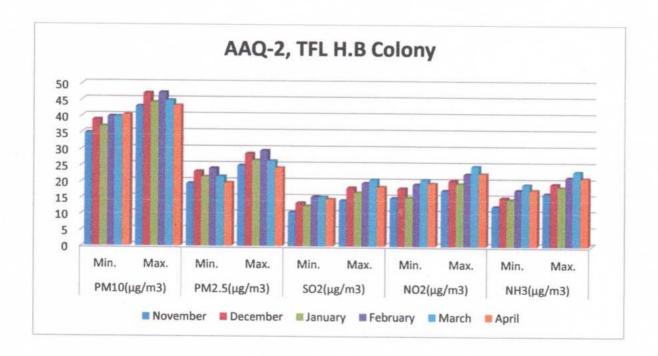






AAQ2-TFL H.B Colony

Months	PM10(μg/m3)		PM2.5(µg/m3)		SO2(µg/m3)		NO2(μg/m3)		NH3(μg/m3)		VOC
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	(µg/m3)
November	34.80	43.00	19.40	24.90	10.40	14.10	14.90	17.30	12.30	16.40	0
December	38.80	47.00	23.00	28.60	13.30	18.12	17.90	20.40	15.04	19.40	0
January	36.80	44.20	21.40	26.50	12.40	16.60	15.10	19.40	14.50	18.40	0
February	39.80	47.20	24.00	29.50	15.30	19.60	19.20	22.40	17.50	21.40	0
March	39.80	44.80	21.50	26.30	15.20	20.60	20.60	24.80	19.20	23.20	0
April	40.30	43.20	19.60	24.20	14.50	18.40	19.50	22.50	17.50	21.20	0
NAAQ Standards	100		60		80		80		400		

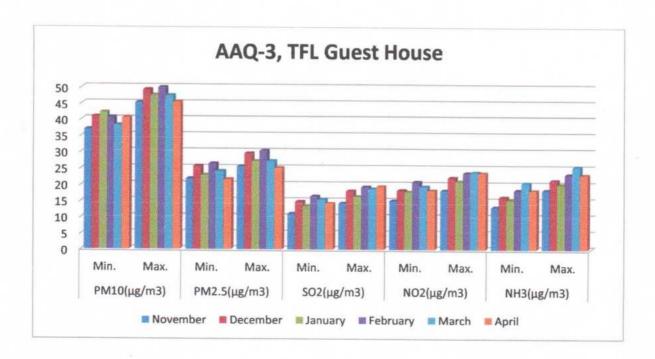






AAQ3-TFL Guest House

Months	PM10(μg/m3)		PM2.5(µg/m3)		SO2(µg/m3)		NO2(μg/m3)		NH3(μg/m3)		VOC
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	(µg/m3)
November	36.90	45.30	21.80	25.50	11.10	14.30	15.10	18.30	13.20	18.40	0
December	40.90	49.30	25.60	29.50	14.80	18.12	18.30	22.20	16.20	21.40	0
January	42.20	47.60	22.90	27.20	13.50	16.40	17.90	21.10	15.40	20.20	0
February	40.60	50.00	26.40	30.30	16.50	19.40	20.90	23.60	18.40	23.20	0
March	38.20	47.50	24.10	27.20	15.50	18.80	19.50	23.80	20.60	25.50	0
April	40.50	45.50	21.60	25.10	14.20	19.50	18.30	23.60	18.30	23.10	0
NAAQ Standards	100		60		80		80		400		

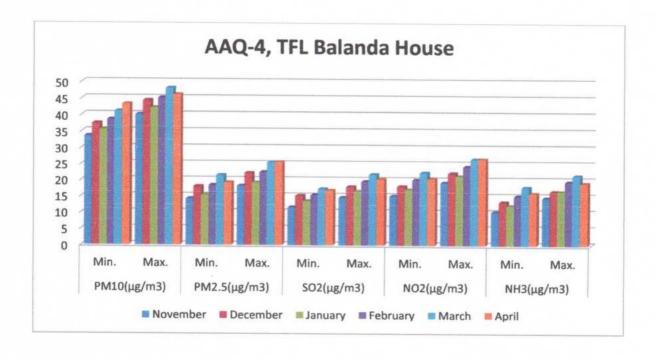






AAQ4-TFL Balanda House

Months	PM10(	μg/m3)	PM2.5	(µg/m3)	SO2(j	ıg/m3)	NO2(	ug/m3)	NH3()	ug/m3)	VOC
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	(µg/m3)
November	33.60	40.10	14.20	18.20	11.60	14.60	15.10	19.30	10.30	14.60	0
December	37.40	44.40	18.00	22.20	15.20	18.00	18.08	22.23	13.30	16.60	0
January	35.60	42.20	15.40	19.20	13.60	16.60	17.10	21.30	12.20	16.60	0
February	38.60	45.20	18.40	22.50	15.40	19.60	20.10	24.30	15.20	19.60	0
March	41.10	48.10	21.50	25.50	17.30	21.80	22.40	26.60	17.90	21.50	0
April	43.30	46.20	19.20	25.60	16.80	20.30	20.50	26.60	16.00	19.20	0
NAAQ Standards	10	00	6	0	8	0	8	0		00 .	

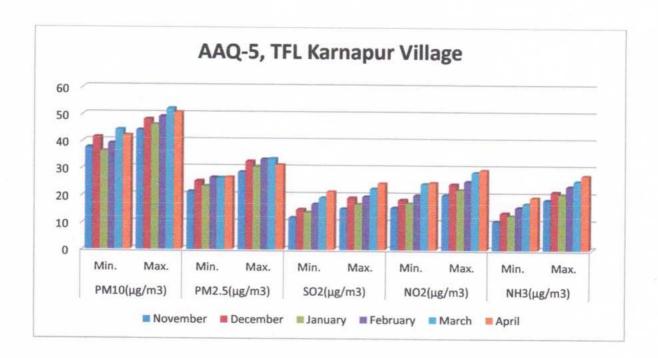






AAQ5-TFL Karnapur Village

Months	PM10(	μg/m3)	PM2.5	μg/m3)	SO2(	ıg/m3)	NO2(	ug/m3)	NH3(I	ıg/m3)	VOC
	Min.	Max.	(µg/m3)								
November	37.60	44.20	21.40	28.50	11.90	15.20	15.60	20.30	10.80	18.60	0
December	41.50	48.20	25.20	32.50	14.90	19.20	18.50	24.30	13.80	21.60	0
January	36.20	46.20	23.40	30.50	13.90	16.90	17.20	22.30	12.80	20.60	0
February	39.20	49.20	26.50	33.30	16.90	19.70	20.20	25.30	15.80	23.60	0
March	44.30	52.20	26.40	33.50	19.20	22.60	24.40	28.60	17.20	25.50	0
April	42.20	50.80	26.60	31.20	21.50	24.50	24.80	29.40	19.40	27.50	0
NAAQ Standards	10	00	6	0		0		0	4(		

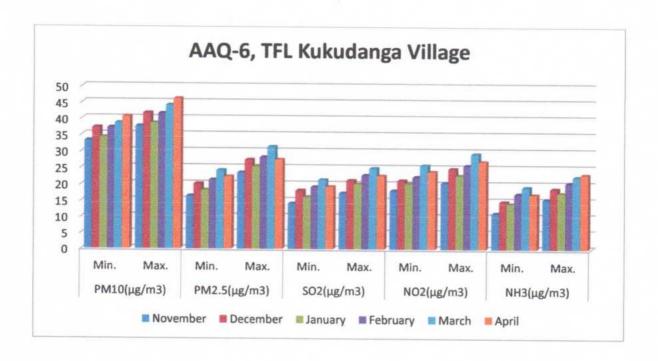






AAQ6-TFL Kukudanga Village

Months	PM10(	PM10(μg/m3)		PM2.5(µg/m3)		SO2(µg/m3)		ug/m3)	NH3()	ug/m3)	VOC
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	(µg/m3)
November	33.20	37.70	16.40	23.50	14.20	17.40	18.10	20.50	11.20	15.50	0
December	37.20	41.70	20.10	27.40	18.12	21.20	21.20	24.80	14.80	18.80	0
January	34.20	38.60	18.20	25.40	16.20	20.20	20.30	22.80	14.20	17.50	0
February	37.20	41.60	21.30	28.20	19.20	22.80	22.30	25.80	17.20	20.50	0
March	38.60	44.20	24.20	31.40	21.40	24.90	25.80	29.40	19.20	22.40	0
April	40.60	46.20	22.30	27.50	19.30	22.60	23.90	27.00	17.00	23.10	0
NAAQ Standards	10	00	6	60		30		80		00	





#### **AAQ Observations:**

**PM10:** The maximum and minimum concentrations for PM10 were recorded as  $56.20 \mu g/m^3$  at TFL Admin Building and  $33.20 \mu g/m^3$  at TFL H.B Colony.

PM2.5: The maximum and minimum concentrations for PM2.5were recorded as  $33.50 \mu g/m^3$  at Karnapur Village.and  $14.20 \mu g/m^3$  at Balanda House.

SO2: The maximum and minimum concentrations for SO2 were recorded as  $24.90 \mu g / m^3$  at Kukudanga Village and  $10.40 \mu g / m^3$  at H.B Colony.

NO2: The maximum and minimum concentrations for NO2 were recorded as  $29.40 \mu g/m^3$  at Karnapur Village & Kukudanga Village and  $14.90 \mu g/m^3$  at TFL H.B Colony

NH3: The maximum and minimum concentrations for NH3 were recorded as  $27.50 \mu g/m^3$  at TFL Karnapur Village and  $10.30 \mu g/m^3$  at Balanda House

The overall concentrations of PM10, PM2.5, SO2, NO2 and NH3 were observed to be well within the standards prescribed by Central Pollution Control Board (CPCB) for industrial, Rural, Residential and other area.



#### 3.0 Noise Monitoring Details

Accordingly, a Noise Monitoring was conducted at 06 locations during the period of 1st November 2024 to 30th April 2025.

(November 2024 – April 2025). The location of Ambient Noise sampling stations has been presented below in Table 4 & Table 5.

Table4: Details of sampling locations

S.No.	Location Name	With respect to	project site
		Direction	Distance
1	TFL Admin Building	-	-
2	H.B. Colony	ENE	1.2 km
3	TFL Guest House	-	-
4	Balanda Village	NW	2.5km
5	Karnapur Village	W	4.5km
6	Kukudanga Village	SW	2.5km

Table5: Details of Air Quality Monitoring Locations (November 2024 to April 2025)

S.No.	Sample Code	Sampling Locations	Geographical Locations
1	TFL/N1	TFL Admin Building	20°54'42.8"N , 85°09'38.4"E
2	TFL/N2	H.B Colony	20°54'19.3"N, 85°10'20.4"E
3	TFL/N3	TFL Guest House	20°54'14.8"N, 85°09'56.9"E
4	TFL/N4	Balanda Village	20°55'31.0"N, 85°09'26.8"E
5	TFL/N5	Karanapur Village	20°54'26.4"N, 85°07'06.1"E
6	TFL/N6	Kukudanga Village	20°53'23.3"N, 85°08'50.8"E

#### 3.1 Results

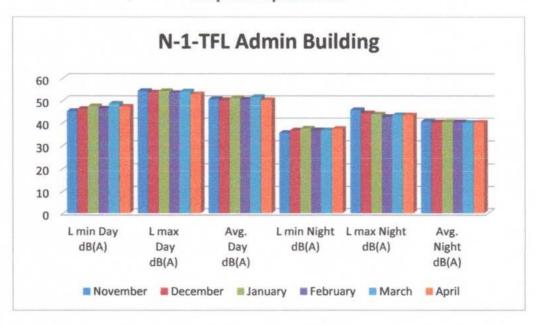
The observations made on air quality parameters at 06 locations have been presented in the test reports. Minimum and maximum values, arithmetic mean values of the 24 hour / 8 hour average concentrations have also been computed and presented.



N1-TFL Admin Building

Month of Sampling	L min Day dB(A)	L max Day dB(A)	Avg. Day dB(A)	L min Night dB(A)	L max Night dB(A)	Avg. Night dB(A)
November	49.50	55.50	52.00	35.50	45.50	40.56
December	48.60	54.80	52.03	36.70	43.10	40.95
January	49.20	54.60	52.54	36.40	44.80	40.26
February	50.50	53.30	51.61	35.60	43.60	40.07
March	48.70	54.10	51.78	36.20	44.10	40.23
April	46.90	52.50	50.17	36.40	43.90	40.39

#### **Graphical Representation**



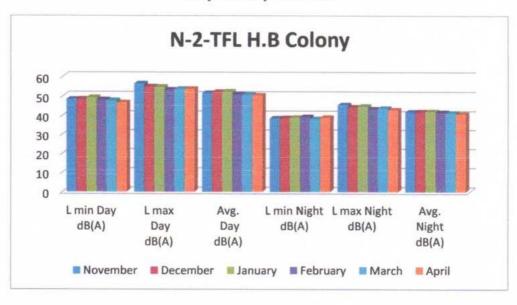
#### Observation:

The Noise level monitoring samplings in the TFL Admin Building are taken for 8 days for each month (Nov' 2024 to April' 2025). The above table shows the minimum to maximum range and average range of sample results. Comparing to all the months, November month shows the highest level of 55.50 dB (A) Day for L max Day, November month shows the minimum level of 35.50 dB (A) Night for L min Night.

N2-TFL H.B Colony

Date of Sampling	L min Day dB(A)	L max Day dB(A)	Avg. Day dB(A)	L min Night dB(A)	L max Night dB(A)	Avg. Night dB(A)
November	48.50	56.50	51.60	38.50	45.50	41.89
December	48.60	54.90	52.10	38.60	44.30	41.96
January	49.50	54.80	52.36	38.90	44.90	42.14
February	48.30	53.30	51.02	39.30	43.40	41.64
March	47.90	53.70	50.81	38.20	43.80	41.30
April	46.80	53.70	50.50	38.90	42.90	40.79

#### **Graphical Representation**



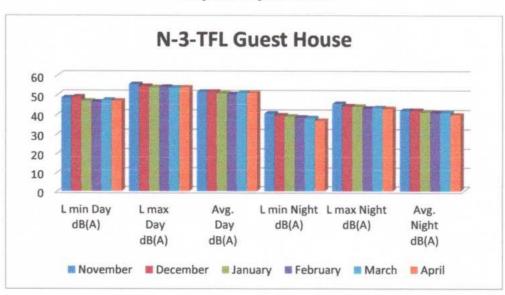
#### Observation:

The Noise level monitoring samplings in the TFL H.B Colony are taken for 8 days for each month (Nov' 2024 to April' 2025). The above table shows the minimum to maximum range and average range of sample results. Comparing to all the months, November month shows the highest level of 56.50 dB (A) Day for L max Day, March month shows the minimum level of 38.20 dB (A) Night for L min Night.

N3-TFL Guest House

Date of Sampling	L min Day dB(A)	L max Day dB(A)	Avg. Day dB(A)	L min Night dB(A)	L max Night dB(A)	Avg. Night dB(A)
November	48.50	55.50	51.54	40.50	45.50	42.06
December	48.90	54.50	51.53	39.50	44.20	41.99
January	46.90	53.90	50.77	38.90	44.10	41.24
February	46.40	54.10	50.38	38.40	43.10	40.88
March	47.30	53.70	51.10	38.10	43.40	40.92
April	46.90	53.80	51.03	36.80	42.90	39.78

#### **Graphical Representation**



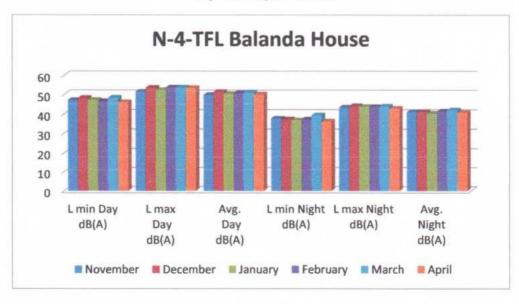
#### Observation:

The Noise level monitoring samplings in the TFL Gust House are taken for 8 days for each month (Nov' 2024 to April' 2025). The above table shows the minimum to maximum range and average range of sample results. Comparing to all the months, November month shows the highest level of 55.50 dB (A) Day for L max Day, April month shows the minimum level of 36.80 dB (A) Night for L min Night.

N4-TFL Balanda House

Date of Sampling	L min Day dB(A)	L max Day dB(A)	Avg. Day dB(A)	L min Night dB(A)	L max Night dB(A)	Avg. Night dB(A)
November	47.20	51.50	49.88	37.80	43.50	41.16
December	48.30	53.60	51.41	37.30	44.20	41.14
January	47.30	52.40	50.44	36.90	43.90	40.48
February	46.70	53.70	50.82	37.30	43.80	41.50
March	48.50	53.70	51.18	39.50	44.10	42.17
April	46.20	53.50	50.21	36.30	42.90	40.89

#### **Graphical Representation**



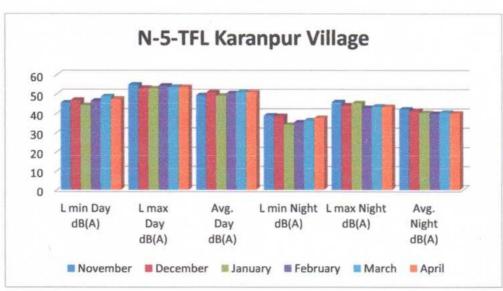
#### Observation:

The Noise level monitoring samplings in the TFL Balanda House are taken for 8 days for each month (Nov' 2024 to April' 2025). The above table shows the minimum to maximum range and average range of sample results. Comparing to all the months, Feb & March month shows the highest level of 53.70 dB (A) Day for L max Day, April month shows the minimum level of 36.30 dB (A) Night for L min Night.

#### N5-TFL Karanpur Village

Date of Sampling	L min Day dB(A)	L max Day dB(A)	Avg. Day dB(A)	L min Night dB(A)	L max Night dB(A)	Avg. Night dB(A)
November	45.50	54.80	49.30	38.80	45.80	42.06
December	46.90	53.10	50.76	38.50	44.10	41.24
January	44.20	52.80	49.13	33.90	45.30	40.23
February	46.50	54.30	50.34	35.20	42.80	39.77
March	48.70	53.60	50.99	36.30	43.60	40.37
April	47.50	53.50	50.91	37.50	43.40	39.93

#### **Graphical Representation**



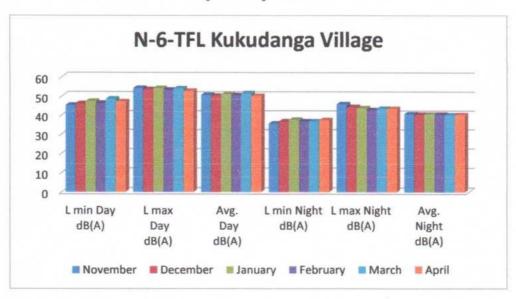
#### Observation:

The Noise level monitoring samplings in the TFL Karanpur Village are taken for 8 days for each month (Nov' 2024 to April' 2025). The above table shows the minimum to maximum range and average range of sample results. Comparing to all the months, November month shows the highest level of 54.80 dB (A) Day for L max Day, January month shows the minimum level of 33.90 dB (A) Night for L min Night.

#### N6-TFL Kukudanga Village

Date of Sampling	L min Day dB(A)	L max Day dB(A)	Avg. Day dB(A)	L min Night dB(A)	L max Night dB(A)	Avg. Night dB(A)
November	45.30	54.30	50.68	35.50	45.80	40.63
December	46.20	53.60	50.24	36.60	44.30	40.26
January	47.50	54.30	51.10	37.50	43.80	40.44
February	46.40	53.40	50.48	36.70	42.70	40.32
March	48.60	54.10	51.61	36.70	43.50	40.04
April	47.30	52.80	50.24	37.30	43.40	40.14

#### **Graphical Representation**



#### Observation:

The Noise level monitoring samplings in the TFL are taken for 8 days for each month (Nov' 2024 to April' 2025). The above table shows the minimum to maximum range and average range of sample results. Comparing to all the months, Nov & January month shows the highest level of 54.30 dB (A) Day for L max Day, November month shows the minimum level of 35.50 dB (A) Night for L min Night.

The Detail Sampling monitoring reports for noise level for each month (Nov'2024 to April'2025) are all within the standard limits.

#### Ground Water monitoring results:

The Ground Water (GW) Level and Condition is monitored in 3 different locations GW1-Tentulei Village, GW2-Balanda Village, GW3-Kukudang Village on following Dated: 28/11/2024, 24/12/2024, 24/01/2025, 24/02/2025, 20/03/2025, and 21/04/2025.

For various parameters. From the Reports, it is shows that sample results for GW-1, GW-2, and GW-3 are within the acceptable Limits as per IS: 10500:2012 and are in **Good Condition**. The Detail Reports are Enclosed Below.

#### Surface Water monitoring results:

The Ground Water (GW) Level and Condition is monitored in 3 different locations SW1-Pump House, GW2-SW2-River Near Jatia Bridge SW3-River near PTBS Thermal Area on following Dated: 28/11/2024, 24/12/2024, 24/01/2025, 24/02/2025, 20/03/2025, and 21/04/2025.

For various parameters. From the Reports, it is shows that sample results for GW-1, GW-2, and GW-3 are within the acceptable Limits as per IS: 10500:2012 and are in **Good Condition**. The Detail Reports are Enclosed Below.



#### Annexure-1

**Environmental Clearance Letter** 



# F. No. J-11011/231/2013-IA-II(I) Government of India Ministry of Environment, Forest and Climate Change (IA- II Section)

Indira Paryavaran Bhawan Jorbagh Road, New Delhi -3

Dated: 9th February, 2018

of 5

Authorised

To

M/s Talcher Fertilizers Ltd Village Vikrampur, Tehsil Talcher District **Angul** (Odisha)

Sub: Setting up Ammonia & Urea Fertilizer Unit at Village Vikrampur, Tehsil Talcher, District Angul (Odisha) by M/s Talcher Fertilizers Ltd - Environmental Clearance -reg.

Sir,

This has reference to your proposal No. IA/OR/IND2/58560/2013 dated 11<sup>th</sup> October, 2017, submitting the EIA/EMP report with public consultation details on the above subject matter.

- 2. The Ministry of Environment, Forest and Climate Change has examined the proposal for environmental clearance to the project for setting up ammonia & urea fertilizer unit based on coal gasification for production of 1.27 MMTPA of neem coated urea (end product) by M/s Talcher Fertilizers Ltd at Village Vikrampur, Tehsil Talcher, District Angul (Odisha).
- The total land area of the project is 570 acre, out of which green belt will be developed in 180 acre. The cost of the project is Rs.10741.05 Crores. The project will provide employment to 1500 people during construction phase.
- 4. The proposed product/unit and capacity are as under:

S.No	Product/Unit	Capacity
1	Ammonia	2200 MTPD
2	Urea (Neem coated)	3850 MTPD
3	Coal Gasification Plant	Synthesis Gas: 242978 Nm3/hr

5. Total water requirement for the project is 49,200 m³/day. The permission for drawal of surface water from Brahmini River has been obtained from the State Government of Odisha vide letter No. 1513/SF/59 dated 3<sup>rd</sup> November, 2009.

The power requirement of 72 MW will be met from the Captive Power Plant. The raw Material required for the project are Coal, Pet Coke and lime stone. During initial stages of operation of the plant, coal shall be supplied through Bhubaneswari Coal Mine of M/s Mahanadi Coalfields Ltd. Later, the project proponent shall develop the dedicated coal mine for the procurement of coal in the desired quantity.

- 6. The project/activity is covered under category A of item 5(a) 'Chemical fertilizers' of the Schedule to the Environment Impact Assessment Notification, 2006, and requires appraisal at central level by the sectoral Expert Appraisal Committee in the Ministry.
- 7. The terms of reference (ToR) for the project was initially granted on 26<sup>th</sup> November, 2013, and then extended up to 25<sup>th</sup> November, 2017. The ToR was transferred in the name of M/s Talcher Fertilizers Ltd from M/s Rashtriya Chemicals & Fertilizers Ltd, vide Ministry's letter dated 27<sup>th</sup> September, 2017. Public hearing was conducted by the State Pollution Control Board on 30<sup>th</sup> August 200 R.



- 8. The proposal for environmental clearance was considered by the EAC (Industry-2) in its meeting held on 12-13 October, 2017. The project proponent and the accredited consultant M/s Projects & Development India Ltd presented the EIA/EMP report. The committee found the EIA/EMP report satisfactory and recommended the proposal for environmental clearance with certain conditions.
- 9. Based on the proposal submitted by the project proponent and recommendations of the EAC (Industry-2), the Ministry of Environment, Forest and Climate Change hereby accords environmental clearance to the project 'Setting up Ammonia & Urea Fertilizer Unit for production of 1.27 MMTPA of Neem Coated Urea (end product)' by M/s Talcher Fertilizers Ltd at Village Vikrampur, Tehsil Talcher, District Angul (Odisha), under the provisions of EIA Notification, 2006 and the amendments made therein, subject to the compliance of terms and conditions, as under:-
- (i) In view of the base line air quality data for PM<sub>10</sub> already exceeding the prescribed standards, one more season data to be collected to confirm the consistency of readings/values, and for suggesting mitigating measures accordingly.
- (ii) The project proponent shall take stringent mitigating measures to minimize the incremental concentration of air pollutants (mainly PM<sub>10</sub> & PM<sub>2.5</sub>) to the extent possible due to the proposed industrial operations.
- (iii) The project proponent shall develop local air quality management plan in consultation with SPCB and implemented to achieve desired standards.
- (iv) The incremental ground level concentrations (GLCs) for PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub> & NO<sub>2</sub> due to the increased vehicular and other allied/developmental activities, shall be analysed and reported for actual impact of the project, besides remedial measures.
- (v) Consent to Establish/Operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.
- (vi) As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises.
- (vii) Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016, Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.
- (viii) National Emission Standards for Organic Chemicals Manufacturing Industry issued by the Ministry vide G.S.R. 608(E) dated 21<sup>st</sup> July, 2010 and amended from time to time shall be followed.
- (ix) To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.
- (x) Total fresh water requirement shall not exceed 49200 cum/day to be met from surface water from Brahmini River. Prior permission in this regard shall be obtained from the concerned regulatory authority.
- (xi) Process effluent/any wastewater shall not be allowed to mix with storm water. Storm water drain shall be passed through guard pond.
- (xii) Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm, and solvent transfer through pumps.

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(xiii) ETP sludge, process inorganic & evaporation salt, if any, shall be disposed of the the TSQF.



- (xiv) The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.
- (XV) The company shall undertake waste minimization measures as below:-
  - Metering and control of quantities of active ingredients to minimize waste.
  - Reuse of by-products from the process as raw materials or as raw material substitutes in (b) other processes.
  - (c) Use of automated filling to minimize spillage.
  - Use of Close Feed system into batch reactors. (d)
  - (e) Venting equipment through vapour recovery system.
  - (f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- (xvi) The green belt of 5-10 m width shall be developed in more than 33% of the total project area. mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.
- (xvii) All the commitment made regarding issues raised during the Public Hearing/consultation meeting held on 30th August, 2017 shall be satisfactorily implemented
- At least 2.5% of the total project cost shall be allocated for Enterprise Social Commitment based (xviii) on Public Hearing issues and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.
- For the DG sets, emission limits and the stack height shall be in conformity with the extant (xix) regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.
- (XX) The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms.
- Occupational health surveillance of the workers shall be done on a regular basis and records (xxi) maintained as per the Factories Act.
- Continuous online (24x7) monitoring system for stack emissions shall be installed for (xxii) measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.
- The grant of environmental clearance is subject to compliance of other general conditions, as 9.1. under:-
- (i) The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board, Central Pollution Control Board, State Government and any other statutory authority.
- No further expansion or modifications in the plant shall be carried out without prior approval of (ii) the Ministry of Environment, Forest and Climate Change. In case of deviations or alterations in the project proposal from those submitted to this Ministry for clearance, a fresh reference shall be made to the Ministry to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.
- (iii) The locations of ambient air quality monitoring stations shall be decided in consultation with the State Pollution Control Board (SPCB) and it shall be ensured that at least one station each is installed in the upwind and downwind direction as well as where maximum ground level concentrations are anticipated. uthorised 3 of 5

- (iv) The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 shall be followed.
- (v) The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under Environment (Protection) Act, 1986 Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).
- (vi) The Company shall harvest rainwater from the roof tops of the buildings and storm water drains to recharge the ground water and use the same water for the process activities of the project to conserve fresh water.
- (vii) Training shall be imparted to all employees on safety and health aspects of chemicals handling. Pre-employment and routine periodical medical examinations for all employees shall be undertaken on regular basis. Training to all employees on handling of chemicals shall be imparted.
- (viii) The company shall also comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.
- (ix) The company shall undertake all relevant measures for improving the socio-economic conditions of the surrounding area. ESC activities shall be undertaken by involving local villages and administration.
- (x) The company shall undertake eco-developmental measures including community welfare measures in the project area for the overall improvement of the environment.
- (xi) The company shall earmark sufficient funds towards capital cost and recurring cost per annum to implement the conditions stipulated by the Ministry of Environment, Forest and Climate Change as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so earmarked for environment management/ pollution control measures shall not be diverted for any other purpose.
- (xii) A copy of the clearance letter shall be sent by the project proponent to concerned Panchayat, Zilla Parishad/Municipal Corporation, Urban local Body and the local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal.
- (xiii) The project proponent shall also submit six monthly reports on the status of compliance of the stipulated Environmental Clearance conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF&CC, the respective Zonal Office of CPCB and SPCB. A copy of Environmental Clearance and six monthly compliance status report shall be posted on the website of the company.
- (xiv) The environmental statement for each financial year ending 31st March in Form-V as is mandated shall be submitted to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental clearance conditions and shall also be sent to the respective Regional Offices of MoEF&CC by e-mail.
- (xv) The project proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB/Committee and may also be seen at Website of the Ministry at http://moef.nic.in. This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be profite vernacular

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Authorisered 4 of 5

- language of the locality concerned and a copy of the same shall be forwarded to the concerned Regional Office of the Ministry.
- (xvi) The project authorities shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of start of the project.
- 10. The Ministry may revoke or suspend the clearance, at subsequent stages, if implementation of any of the above conditions is not satisfactory.
- 11. The Ministry reserves the right to stipulate additional conditions, if found necessary. The company in a time bound manner will implement these conditions.
- 12. The above conditions will be enforced, inter alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, Air (Prevention & Control of Water Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and rules.

(S. K. Srivastava) Scientist E

#### Copy to:-

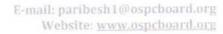
- The Additional PCCF (C), MoEF&CC Regional Office (EZ), A/3, Chandersekharpur, Bhubaneswar -23 (Odisha)
- 2. The Secretary, Department of Forest and Environment, Government of Odisha, Bhubaneswar (Odisha)
- 3. The Member Secretary, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi 32
- 4. The Member Secretary, Odisha State Pollution Control Board, Paribesh Bhawan, A/118, Nilakantha Nagar, Unit VIII, Bhubaneswar -12 (Odisha)

5. Guard File/Monitoring File/Website/Record File

(S. K. Srivastava)

Scientist É

Page 5 of 5







### STATE POLLUTION CONTROL BOARD, ODISHA

[DEPARTMENT OF FOREST, ENVIRONMENT & CLIMATE CHANGE, GOVERNMENT OF ODISHA]
Paribesh Bhawan, A/118, Nilakantha Nagar, Unit – VIII
Bhubaneswar – 751012

No. 10261 /

IND-II-CTE-7470

Date: 29.09.2025/

I brough online By speed post

#### REVALIDATED CONSENT TO ESTABLISH ORDER

- In consideration of online application ID- 2324926, the Consent to Establish was granted to M/s Talcher Fertilizers Limited (TFL) vide no. 12951/IND-II-NOC-6253, Dt. 30.11.2019 for production of Ammonia (2200 MTPD), Urea (Neem Coated) (3850 MTPD) and Coal Gasification Plant (Synthesis Gas: 242978 Nm³/hr) with project cost of Rs. 13,277 Crore over an area of 490.7 Acres, At-Talcher, PO- Vikrampur, District- Angul.
- 2. The Consent to Establish order 12951, Dt. 30.11.2019 was valid for five years up to 29.11.2024.
- M/s Talcher Fertilizers Limited (TFL) has obtained Environmental Clearance from MoEF & CC, Govt. of India vide F.No.J-11011/ 231/ 2013 IA. II(I) Dt. 9-02-2018 for setting up of Ammonia & Urea Fertilizer Unit at Vikrampur Tahasil Talcher District Angul, Odisha for production of Ammonia (2200 MTPD), Urea (Neem Coated) (3850 MTPD) and Coal Gasification Plant (Synthesis Gas: 242978 Nm³/hr).
- M/s Talcher Fertilizers Limited (TFL) has submitted application for revalidation of CTE order 12951, Dt. 30.11.2019 as per Guidelines for auto revalidation/modification of Consent to Establish order of SPCB, Odisha vide notification no. 10534/Ind-II-NOC-Misc.-68 dated 27.06.2016 vide online application no. 5995842.
- M/s Talcher Fertilizers Limited (TFL) has submitted declaration form indicating that, the project capacity and configuration has not changed with respect to the original application.

In consideration of the online application no. 5995842 for obtaining Consent to Establish of M/s Talcher Fertilizers Limited (TFL) read with Guidelines for auto revalidation/modification of Consent to Establish order of SPCB, Odisha vide notification no. 10534/Ind-II-NOC-Misc.-68 dated 27.06.2016, the State Pollution Control Board is pleased to extend the validity period of Consent to Establish issued vide Letter No. 12951, Dt. 30.11.2019 for production of Ammonia (2200 MTPD). Urea (Neem Coated) (3850 MTPD) and Coal Gasification Plant (Synthesis Gas: 242978 Nm³/hr) with a revised project cost of Rs. 17080.69 Crore for a period of five years from the date of expiry of above Consent to Establish order 12951, Dt. 30.11.2019 or the validity of Environmental Clerance whichever is earlier.

All other matter and conditions as given in the above Consent to Establish order issued vide letter No. 12951/IND-II-NOC-6253, Dt. 30.11.2019 shall remain unchanged.

MEMBER SECRETARY

To.

The Director Operation
M/s Talcher Fertilizers Limited (TFL)
At: Talcher, PO: Vikrampur,
District: Angul – 759106

Memo No	/Date_	1

Copy forwarded to:

- 1. The Collector and District Magistrate, Angul
- 2. The Director of Factories & Boiler, Bhubaneswar
- 3. The DFO, Angul
- 4. The Regional Officer, SPCB, Odisha, Angul
- 5. CTO Cell, SPCB, Odisha, Bhubaneswar
- 6. HWM Cell, SPCB, Odisha, Bhubaneswar
- 7. Guard file

ADDI.. CHIEF ENV. ENGINEER







Tel: 2564033/2563924 EPABX: 2561909/2562847

E-mail: paribesh1@ospcboard.org Web site: www.ospcboard.org

# OFFICE OF THE

# STATE POLLUTION CONTROL BOARD, ODISHA

(Department of Forest & Environment, Govt. of Odisha)

Paribesh Bhawan, A/118, Nilakantha Nagar, Unit-VIII

Bhubaneswar – 751012

Through online/ By Speed Post

No. 12951 /IND-II-NOC-6253

Date 30.11.2019 /

# OFFICE MEMORANDUM

In consideration of the application no. 2324926 received through online for obtaining Consent to Establish for M/s Talcher Fertilizers Ltd. (TFL), the State Pollution Control Board is pleased to convey its Consent to Establish under Section 25 of Water (Prevention & Control of Pollution) Act, 1974 and Section 21 of Air (Prevention & Control of Pollution) Act, 1981 for following production/unit capacity:

SI. No.	Name of the facility	Capacity
1.	Ammonia	2200 MTPD
2.	Urea (Neem Coated)	3850 MTPD
3.	Coal Gasification Plant	Synthesis Gas. 242978 Nm3/hr

with project cost of ₹ 13,277.00 Crores over an area of 490.7 acres, At - Talcher, P.O. - Vikrampur (as per plot nos. & Khata nos mentioned in Application Form) in the District of Angul with following conditions:

# GENERAL CONDITIONS:

- 1. This Consent to Establish is valid for the raw materials, product, manufacturing process and capacity mentioned in the application form. This order is valid for five years. The proponent shall commence construction of the project within a period of five years from the date of issue of this order. If the proponent fails to do substantial physical progress of the project within five years then a renewal of this Consent to Establish shall be sought by the proponent
- 2. The industry shall comply to the provisions of Environment Protection Act, 1986 and the rules made there under with their amendments from time to time such as the Hazardous and Other Wastes (Management and Trans-boundary Movement) Rules, 2016 as amended from time to time, Hazardous Chemical Rules, / Manufacture, Storage and Import of Hazardous Chemical Rules, 1989 etc. and amendments there under. The industry shall also comply to the provisions of Public Liability Insurance Act, 1991, if applicable.
- The Industry is to apply for grant of Consent to Operate under Section 25/26 of Water (Prevention & Control of Pollution) Act, 1974 & Air (Prevention & Control of Pollution) Act, 1981 at least 3 (three) months before the commercial production and obtain Consent to Operate from this Board

 This Consent to Establish is subject to statutory and other clearances from Govt. of Odisha and / or Govt. of India as and when applicable.

# SPECIAL CONDITIONS:

# A. GENERAL:

- The proponent shall carryout construction activity of the proposed Fertilizer Plant as per Environmental Clearance granted by MoEF&CC, Govt. of India, vide No. J-11011/231/2013-IA-II (I), date 09.02.2018.
- 2. This Consent to Establish is granted for the capacity as mentioned above and any expansion in the capacity, change or modification in the process, addition, alternation any nature has to be undertaken with prior approval of the Board. For any change in the site or area, fresh Consent to Establish has to be obtained from the Board. The proponent shall carry out construction activity as per approved revised lay out map (enclosed). If the proponent wants to change the approved plant layout map, they can submit a modified plant layout map with adequate justification for such modification.
- The proponent shall implement the Pollution Control Measures and safeguards as proposed in the Environment Management Plan (EMP) of Environment Impact Assessment (EIA) report and project report.
- The proponent shall obtain permission from concerned authorities for drawal of surface water / ground water.
- The proponent shall identify the old contaminated sites of old plant and shall remediate the same before start of construction of new plant facilities.
- A relatively thick green coverage may be provided on the north-west and east sides of the plant keeping in view the high noise and dust level.
- At least 5% of the total energy use (plant & colony) shall be from non-conventional sources.
- Good housekeeping practices shall be followed to improve the work environment.
   All roads and shop floors shall be cleaned regularly.
- The construction and demolition wastes to be generated from the proposed project shall be disposed of in accordance with the provision under "Construction & Demolition Wastes Management Rules 2016".
- The proponent shall comply to the provisions of E-Waste (Management) Rules,
   2016 and shall handover e-waste to authorized collection centers/ register dismantlers/ recyclers for proper disposal of e-waste.
- 11. All the plastic waste generated from industry during construction and commissioning shall be collected and sent for co-processed in a cement kiln.
- Monitoring of stack emissions, fugitive emissions, trade effluent and noise level shall be done as per CPCB regulations.
- 13. The unit shall explore the transportation of raw materials and products through the instead of trucks.

- 14. A green belt of adequate width and density preferably with local species along the periphery of the unit shall be raised so as to provide protection against particulates and noise. It must be ensured that at least 33% (163.9 acres) as proposed of the total land area shall be under permanent green cover, in such a manner that, atleast plantation shall be taken up at least in 20% of the total green belt area and progressively achieve 100% in a span of five years and under no circumstances this land earmarked for green belt shall be used for any other purpose.
- 15. The civil construction shall be carried out with the fly ash bricks. If the fly ash bricks are not available locally the civil construction may carried out with other bricks with prior intimation to the concerned Regional Office of SPC Board. A statement indicating use of fly ash bricks during construction period shall be submitted to the Board quarterly for record.
- 16. The proponent should shall full-fledged environmental management cell and the head of environmental management cell shall report directly to the unit Chief Administrator (say M.D.). A detailed proposal to this effect is to be submitted.
- 17. The land on which the unit is proposed to be established shall be converted to industrial use Kisam by the competent authority. The copy of said land conversion document shall be submitted to the Board along with Consent to Operate application.
- 18. The Board may impose further conditions or modify the conditions stipulated in this order during installation and /or at the time of obtaining Consent to Operate and may revoke this clearance in case the stipulated conditions are not implemented and /or any information suppressed in the application form.
- 19. The industry shall apply for grant of Consent to Operate under section 25/26 of Water (Prevention & Control of Pollution) Act, 1974 & under section 21 of Air (Prevention & Control of Pollution) Act, 1981 at least 3 (three) months before the commercial production and obtain Consent to Operate from this Board. No production activity shall commence prior to installation of all pollution control measures.
- 20. The unit shall abide by E (P) Act. 1986 and Rules framed thereunder.
- 21. Depending on the environmental condition, stricter standards may be imposed for the effluent or restriction for discharge may be made for which adequate facilities from the beginning shall be made to meet such situation in future

#### B. WATER POLLUTION:

- 22. The unit shall install online Continuous Effluent Quality Monitoring System (CEQMS) at the outlet of Effluent Treatment Plant (ETP) for online real time data transmission through GPRS system to SPCB RTDAS server and also upload data for use by CPCB.
- 23. The domestic wastewater generated from the industry shall be treated in sewage treatment plant to meet the following standards as notified by the MoEF&CC, Govt. of India vide G.S.R. 1265 (E), dated 13.10.2017. The treated water shall be reused for gardening and plantation. Under no circumstances there shall be any discharge of treated waste water to outside the factory premises.

SI. No.	Parameters	Standards
1.	pH	6.5-9.0
2.	BOD(mg/l)	30
3.	TSS(mg/l)	<100
4.	Fecal Coliform (MPN/100ml)	< 1000

- 24. Use of treated as well as recycled water and rain water harvesting shall be widely adopted for conservation of water.
- 25. Process effluent / any wastewater shall not be allowed to mix with storm water. The proponent shall provide separate drain for storm water and process water.
- 26. The waste water generated in DM plant and Ammonia Plant during normal operation shall be treated in the In-plant Treatment Systems so that the same is recycled / neutralized in the plant and treated effluent shall be utilized for green belt and floor washings.
- 27. The proponent shall provide garland drains around coal storage area and all the stock pile area, followed by series of settling tanks to retain the solids, if any, in order to prevent damage to the surrounding land and water bodies.
- 28. The proponent shall construct, a full-fledged ETP of capacity 900 KLD for treatment of waste water generated from plant and treated water shall be completely reused. The proponent shall adopt Zero Liquid Discharge (ZLD) concept and under no circumstances the waste water shall be discharged to outside the factory premises.
- 29. The treated effluent shall be recycled and reused in the industry and/or used for water spraying or green belt development etc. The excess waste water shall be collected in Central Effluent Treatment Plant (CETP).
- The treated waste water from the CETP shall be utilized after meeting the following standard

Parameters	Limiting concentration in mg/l except for pH		
pH	5.5 to 9.0		
Suspended solids	100		
BOD, 3days, 27°C	30		
COD	250		
Oil & Grease	10		
Ammonical Nitrogen as N	50		
Cyanide as CN	0.2		
Phenolic compound	1.0		
Copper (Total)	3.0		
Iron (Total)	3.0		
Free available Chlorine	0.5		
Zinc	5.0		
Chromium (Total)	0.2		
Phosphate	5.0		

31. Storm water shall not be allowed to mix with effluent, scrubber water and / or floor washing and shall be channelized through separate drains as per natural gradient, passing through High Density Polyethylene (HDPE) lined pits, each having holding capacity of 10 minutes (hourly average) of rainfall.

ABOR

32. Rain water harvesting structure shall be developed inside the plant premises and maximum effort shall be made to reuse harvested rain water, with a definite plan and programme to reduce the drawl of fresh water from water bodies.

# C. AIR POLLUTION:

- 33. Necessary preventive measures shall be taken during construction phase so that the ambient air quality including noise shall conform to National ambient air quality standards and standards for noise in industrial area as per Annexure-I. Ambient air quality at the boundary of the plant premises shall meet the prescribed standards of the Board as per Annexure - II. The ambient air quality monitoring report shall be submitted to the Board every month.
- 34. The unit shall install online Continuous Stack Emission Monitoring Systems (CSEMS) at all the stacks of the plant for online real time monitoring for PM, SO₂ and Flouride and data transmission through GPRS system to SPCB RTDAS server and also upload data for use by CPCB.
- 35. The unit shall install online Continuous Ambient Air Quality Monitoring Systems (CAAQMS) within and outside the plant premises atleast at four locations for online real time monitoring and data transmission through GPRS system to SPCB RTDAS server and also upload data for use by CPCB.
- Ambient Air Quality shall be maintained as per National Ambient Air Quality standard prescribed for industrial and mixed used area under E(P) Act, 1986.
- 37. Air compressor and DG set shall be acoustically designed and shall be housed in appropriate acoustic enclosures so that the noise level outside it shall conform to the prescribed norms.
- 38. The height of the stack attached to the D.G sets shall confirm to the following:

H = h + 0.2√KVA (Where, h = Height of the building where it is installed in meter KVA = Capacity of D.G Set and H = Height of the stack in meter above ground level)

- The proponent shall install inbuilt system for removal of H₂S and Carbonyl Sulphide & Sulphur shall be recovered in the form of elemental Sulphur.
- 40. Wet limestone shall be used for flue gas desulphurization for 95% control of SO<sub>2</sub>. Low NOx burners and selective catalyst reduction (SCR) shall be provided for high efficiency NOx control. Electrostatic Precipitator shall be installed for control of Particulate Matters.
- 41. Raw materials and products shall be stored in covered sheds and adequate dust suppression measures shall be taken to control fugitive emission from handling of raw materials and products.
- 42. Working area including the roads surrounding the plant shall be asphalted or concreted & water sprinkling system shall be installed to suppress the fugitive dust emission.
- 43. Both dust suppression (dry fog) and extraction (bag filter) system shall be provided at all dust generating source such as crushing, screening & material transfer points etc. to control fugitive emission.

- 44. The unit shall provide adequate, both dust suppression (dry fog) and extraction (bag filter) system at all potential dust generating sources including Coal Handling Plant so that particulate matter emission shall not exceed 100 mg/Nm³. Stack height for de-dusting unit shall be calculated as per the formula H = 74Q 0.27, where H and Q are stack height in meter and Particulate Matter (PM) emission in ton/hr respectively.
- 45. The proponent shall install Pneumatic dust handling system in all Bag Filter hoppers with common silo and telescopic chute arrangement. Mechanical operated system for timely collection and removal of the flue dust generated in air pollution control device shall be installed.
- 46. Air pollution control devices shall be maintained properly. Fabric bags and cages in bag house shall be checked regularly and replaced whenever required. Adequate availability of spares shall be ensured for immediate replacement.
- 47. All Pollution control equipment may be provided with separate electricity meter and totalizer for continuous recording of power consumption. The amperage of the ID fan may also be recorded continuously. Non-functioning of Pollution control equipment should be recorded in the same logbook along with reasons for not running the Pollution Control Equipment
- 48. The unit shall provide porthole and platform at suitable location with safe approach to conduct emission and monitoring at all the stacks.

# D. <u>SOLID AND HAZARDOUS WASTE:</u>

- The industry shall develop hazardous waste disposal site as per guideline of Central Pollution Control Board, Delhi for disposal of Hazardous Waste.
- 50. Sludge from raw Water Treatment Plant (WTP) shall be dewatered (centrifuged) with Decanter and the solid cake shall be used as manure after proper conditioning. Sludge from ETP shall be dewatered through suitable processes (decanter / Pressure Belt Filter). Solid cake of ETP shall be used either as manure or disposed off along with bottom ash.
- 51. Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc., Flame arresters shall be provided on tank farm, and solvent transfer shall be one through pumps.
- 52. All the Hazardous Wastes generated from the unit shall be stored under covered shed on concrete platforms and drain arrangement for collection of spillage in any before going for final disposal to the Hazardous Waste disposal site/ through CPCB/SPCB authorised vendors.
- 53. Coal tar generated if any from Coal Gasification plant shall be stored in an impervious pit and disposed off through authorized operators.
- 54. The proponent shall establish Mechanized Waste Convertor having polycrack method and other similar method for processing of Municipal Solid Waste generated from the unit, under covered shed to produce valuable products like oil, water, gas, carbon, metal, glass etc.

- 55. The other solid waste generated from the unit shall be suitably disposed off without causing any public nuisance or environmental contamination.
- 56. A Solid Waste Management Cell shall be created under Environmental Management Cell and complete utilization of all solid waste shall be envisaged and implemented in a sustained manner. All the available research and development options shall be scouted in this regard. The exact utilization of solid waste shall be finalized in consultation with the State Pollution Control Board.
- 57. The industry shall obtain authorization for management of Hazardous Waste as per previsions of Hazardous and Other Wastes (Management and Trans-boundary Movement) Rules, 2016 as amended from time to time.
- Municipal Solid Waste generated from the unit shall be disposed off as per the Solid Waste Management Rules, 2016 and amendment thereafter.

Encl: Approved plant layout map and Annexures

MEMBER SECRETARY

To

The CEO,
M/s Talcher Fertilizers Limited (TFL),
2nd floor PARC Building,
GAIL Training Institute,
Noida Sector 16A, District - Gautam Budha Nagar,
Tehsil: Noida.

Memo No. 12952 /Date 30.11, 2019

Copy forwarded to:

- 1. The Collector & District Magistrate, Angul
- 2. The District Industries Centre, Angul.
- 3. The Director, Factories & Boiler, Bhubaneswar.
- 4. The Regional Officer, SPC Board, Angul.
- 5. Consent to Operate Section, SPC Board, BBSR.
- 6. The DFO, Angul.
- 7. Hazardous Waste Management Section SPC Board, BBSR.

8. Copy to Guard file

CHIEF ENV. ENGINEER

all

Authorised &

टिप्पण

ा जब कथी और उन्हों भी किसी अपने-अपने प्रवर्ग के लिये दो क्रियेक प्रशासन दिनों पर प्रापित मूल्य, ऊपर विनिर्दिष्ट सीमा से अधिक हो तो इसे नियमित या निरंतर प्रबोधन नथा अंतिरिक्त अन्येषण करवाने के लिये पर्याप्त कारण समझा जायेग्य ।"।

> [फा. सं. क्यू-15017/43/2007-सी.पी.डब्स्यू.] रजनोश दुवे, संयुक्त सचिव

टिप्पण : मूल नियम 'धारत के राजपत्र में असाधारण सं.का.अग.844 (अ), तारीखा 19 नवम्बर 1986 द्वारा प्रकाशित किये गये थे और पश्चातवर्ती संशोधन सं.का.आ.433 (अ), तारीखा 18 अधैल 1987, सा.का.नि. 176 (अ), तारीखा 2 उद्योल 1996 और हाल में ही सा.का.नि. 97 (अ), तारीखा 18 फरवरी 2009: सा.का.नि. 149 (अ), तारीखा 4 मार्च, 2009: सा.का.नि. 512 (अ), तारीखा 9 जुलाई, 2009. सा.का नि. 543 (अ), तारीखा 22 जुलाई, 2009; सा.का.नि. 595 (अ), तारीखा 21 अगस्त, 2009: और सा.का.नि. 974 (अ) तारीखा 04 नवमार 2009 द्वारा प्रकाशित किए गए।

# MINISTRY OF ENVIRONMENT AND FORESTS

#### NOTIFICATION

New Delhi, the 1oth November, 2009

- G.S.R. 826(E).— In exercise of the powers conferred by section 6 and section 25 of the Environment (Protection) Act, 1986 (29 of 1986), the Central Government hereby makes the following rules further to amend the Environment (Protection) Rules, 1986, namely:—
- (1) These rules may be called the Environment (Protection) Seventh Amendment Rules, 2009.
  - (2) They shall come into force on the date of their publication in the Official Gazette.
- 2. In the Environment (Protection) Rules, 1986 (hereinafter referred to as the said rules), in rule 3, in sub-rule (3B), for the words, brackets, figures and letters, "in columns (3) to (5) of Schedule VII", the words, brackets, figures and letters "in columns (4) and (5) of Schedule VII" shall be substituted.
- For Schedule VII to the said rules and entries relating thereto, the following Schedule and entries shall be substituted, namely:—

# "(SCHEDULE VII) [See rule 3(3B)] NATIONAL AMBIENT AIR QUALITY STANDARDS

S. Polistani No.	Pošstani	Pollutani Time Weighted Average		Coacestration in Ambient Air			
	lad Resides and O	ludustrial, Residential, Hural and Other Area	Ecalogically Sensitive Area (notified by Central Government)	Methods of Measurement			
(1)	(2)	(3)	. (4)	(5)	(6)		
1	(SO <sub>1</sub> ), µg/m <sup>3</sup>	Annual*	50	20	- Improved West and Goeke		
		24 hours=*	80	80	-Uturaviolet fluorescence		
2	Nitrogen Dioxide	Annual*	40	30	Modified Jacob &     Hochhelser (Na-		
		24 hours**	80	80	Arsenite) - Chemiluminescence		
3	Particulate Matter (size less than	Annual*	64)	60	- Oravimetric - FOEM		
	10µm) or PM <sub>10</sub> µg/m <sup>3</sup>	24 hours**	100	100	- Beta attenuation		
4	Particulate Matter (size less than	Annual*	+0	40	- Gravimetric - FOEM		
	2.5µm) or PM <sub>1</sub> , µg/m <sup>3</sup>	24 hours**	60	60	- Reta attenuation		

(1)	(2)	(3)	(4)	(5)	(6)
5	Ozone (O <sub>2</sub> )	\$ hours**	100	100	- I/V photometric - Chemilminescence
	, pp	I hour""	180	180	- Chemical Method
6	Lend (Pb)	Annual*	0.50	0.50	- AAS /ICP method after sampling on EPM 2000
		24 hours**	1.0	10	or equivalent filter pape - ED-XRF using Tellon filter
7	Carbon Monoxide(CO)	8 hours**	52	0.2	- Non Dispersive Infra Red (NDIR)
	mg/m²	1 hour**	(H	04	spectroscopy:
8	Ammonia(NH <sub>1</sub> )	Annual*	100	100	-Chemiluminescence
	µg/m³	24 hours**	4.0	400	-Indophenol blue method
9	Benzone (C <sub>o</sub> H <sub>o</sub> ) μg/m <sup>1</sup>	Annual*	05	05	Gas chromatography based continuous analyzer     Adsorption and Desorption followed by GC analysis
18	Benzo(o)Pyrene (BaP) - particulate phase only, ng/m	Annual*	01	01	<ul> <li>Solvent extraction followed by HPLC/GC analysis</li> </ul>
11	Arsenic (As), ng/m <sup>1</sup>	Annual*	06	06	<ul> <li>AAS /ICP method after sampling on EPM 2000 or equivalent filter pape</li> </ul>
					- AAS /ICP method after
12	Nickel (Ni), ng/m1	Annual*	20	20	sampling on EPM 2000
- 4					or equivalent filter pape

- Annual arithmetic mean of minimum 104 measurements in a year at a particular site taken twice a week 24 hourly at uniform intervals.
- 24 hourly or 08 hourly or 01 hourly monitored values, as applicable, shall be compiled with 98% of the time in a year. 2% of the time, they may exceed the limits but not on two consecutive days of monitoring.

Note.— Whenever and wherever monitoring results on two consecutive days of monitoring exceed the limits specified above for the respective category, it shall be considered adequate reason to institute regular or continuous monitoring and further investigation.".

[F. No. Q-15017/43/2007-CPW] RAJNEESH DURE, Jr. Secy

Note.— The principal rules were published in the Cazette of India, Extraordinary vide number S.O.844(E), dated the 19th November, 1980, and subsequently amended vide numbers S.O. 433(E), dated the 18th April, 1987; G.S.R. 176 (E), dated the 2th April 1996, and were recently amended vide numbers G.S.R. 97(E), dated the 18th February, 2009. G.S.R. 149(E), dated the 4th March, 2009; G.S.R. 512(E), dated the 9th July, 2009; G.S.R. 543(E), dated the 2th July, 2009; G.S.R. 595(E), dated the 2th August, 2009; and G.S.R. 794(E), dated the 4th November, 2009.



# [SCHEDULE III]

(See rule 3)

# AMBIENT AIR QUALITY STANDARDS IN RESPECT OF NOISE

Area Code	Category of Area	Limits in dB(A) Leq.		
		Day Time	Night Time	
(A)	Industrial area	75	70	
(B)	Commercial area	65	55	
(C)	Residential area	55	45	
(D)	Silence Zone	50	40	

### Note

- 1. Day time is reckoned in between 6 a.m. and 9 p.m.
- 2. Night time is reckoned in between 9 p.m. and 6 a.m.
- Silence zone is defined as areas upto 100 meters around such premises as hospitals, educational institutions and courts. The Silence Zones are to be declared by the Competent Authority.

Use of vehicular horns, loudspeakers and bursting of crackers shall be banned in these zones.

 Mixed categories of areas should be declared as one of the four above mentioned categories by the Competent Authority and the corresponding standards shall apply.



# Baseline Monitoring Report Results AAQM Reports

(November 2024 to April 2025)



Post Vikrampur, Distt. Angul-759 106

Odisha, India

ULR No.:

TC148142400000100F,131F,233F, 261F,317F,397F,455F,538F

Test Report Date: 09/12/2024

Sample Particulars

Nature of the Sample

Purpose of Monitoring Method of Sampling

Monitoring Conducted By Sampling Duration (Hrs.)

Sampling Location

: Ambient Air Quality Monitoring

To Check the Pollution Load

: IS 5182 (Part 14) : Mr. Manas Satapathy

24 Hrs.

AAQ-1, TFL Admin Building

**Analysis Report** 

Date of Sampling	Concentration of Pollutants						
	Particulate Matter (PM2.5) µg/m³	Particulate Matter (PM10) µg/m³	Sulphur Dioxide (as SO2) µg/m <sup>3</sup>	Nitrogen Dioxide (as NO2) μg/m <sup>3</sup>	Ammonia (as NH3) μg/m³	VOCs, μg/m³	
04/11/2024	20.20	49.20	18.20	21.30	16.40	ND	
07/11/2024	19.20	46.50	19.30	23.30	14.20	ND	
11/11/2024	22.50	50.40	17.50	20.20	14.50	ND	
14/11/2024	20.30	45.20	15.20	19.40	16.20	ND	
18/11/2024	19.60	47.20	17.40	21.10	17.20	ND	
21/11/2024	21.80	51.20	15.20	19.10	15.60	ND	
25/11/2024	19.40	49.30	17.60	21.00	15.50	ND	
28/11/2024	22.20	50.80	17.20	20.00	16.20	ND	
No. of Observation	8	8	8	8	8	8	
Minimum	19.20	45.20	15.20	19.10	14.20	-	
Maximum	22.50	51.20	19.30	23.30	17.20		
Average	20.70	48.70	17.20	20.70	15.70		
NAAQM Standards	60	100	80	80	400	-	
Test Method	40CFR Appendix L Part 53 CPCB Guidelines	IS:5182 (P-23)	IS:5182 (P-2)	IS:5182 (P-6)	Method of Air Sampling & Analysis	SOP No. NL/SOP/AA Q /VOC/ 01	



Post Vikrampur, Distt. Angul-759 106

Odisha, India

Test Report No.:

NL/2024/TFL/11/101

Test Report Date: 09/12/2024

Sample Particulars

Nature of the Sample

Purpose of Monitoring

Method of Sampling Monitoring Conducted By

Sampling Duration (Hrs.) Sampling Location

**Ambient Air Quality Monitoring** 

To Check the Pollution Load

IS 5182 (Part 14)

: Mr. Manas Satapathy

24 Hrs.

AAQ-1, TFL Admin Building

**Analysis Report** 

Date of Sampling	Concentration	on of Pollutants
	Methane HC µg/m³	Non Methane HC μg/m³
04/11/2024	ND	ND
07/11/2024	ND	ND
11/11/2024	ND	ND
14/11/2024	ND	ND
18/11/2024	ND	ND
21/11/2024	ND	ND
25/11/2024	ND	ND
28/11/2024	ND	ND
No. of Observation	8	8
Minimum		
Maximum	-	-
Average	-	*
NAAQM Standards	-	-
Test Method	IS:5182 (P-11)	IS:5182 (P-11)



Post Vikrampur, Distt. Angul-759 106

Odisha, India

ULR No .:

Test Report Date:

TC148142400000101F,132F,234F, 262F,318F,398F,456F,539F

09/12/2024

Sample Particulars

Nature of the Sample

Purpose of Monitoring

Method of Sampling Monitoring Conducted By Sampling Duration (Hrs.)

Sampling Location

**Ambient Air Quality Monitoring** 

To Check the Pollution Load

IS 5182 (Part 14)

: Mr. Manas Satapathy : 24 Hrs.

AAQ-2, H.B.Colony

**Analysis Report** 

Date of Sampling			Concentration of Po	Hutants		
	Particulate Matter (PM2.5) µg/m³	Particulate Matter (PM10) µg/m <sup>3</sup>	Sulphur Dioxide (as SO2) µg/m <sup>3</sup>	Nitrogen Dioxide (as NO2) μg/m <sup>3</sup>	Ammonia (as NH3) μg/m³	VOCs, μg/m³
04/11/2024	22.50	40.50	13.60	17.20	12.30	ND
07/11/2024	24.10	34.80	11.30	15.20	14.70	ND
11/11/2024	21.60	43.00	12.20	16.40	15.30	ND
14/11/2024	19.40	39.10	10.40	14.90	16.40	ND
18/11/2024	22.30	42.20	12.50	16.00	13.30	ND
21/11/2024	21.40	36.70	12.30	17.10	12.60	ND
25/11/2024	22.00	41.50	13.20	15.90	13.00	ND
28/11/2024	24.90	40.40	14.10	17.30	15.40	ND
No. of Observation	8	8	8	8	8	8
Minimum	19.40	34.80	10.40	14.90	12.30	
Maximum	24.90	43.00	14.10	17.30	16.40	_
Average	22.28	39.78	12.45	16.25	14.13	-
NAAQM Standards	60	100	80	80	400	-
Test Method	40CFR Appendix L Part 53 CPCB Guidelines	IS:5182 (P-23)	IS:5182 (P-2)	IS:5182 (P-6)	Method of Air Sampling & Analysis	SOP No. NL/SOP/A Q /VOC/ 0



Post Vikrampur, Distt. Angul-759 106

Odisha, India

Test Report No.:

NL/2024/TFL/11/102

Test Report Date: 09/12/2024

Sample Particulars

Nature of the Sample : Ambient Air Quality Monitoring

Purpose of Monitoring : To Check the Pollution Load Method of Sampling : IS 5182 (Part 14)

Monitoring Conducted By : Mr. Manas Satapathy

Sampling Duration (Hrs.) : 24 Hrs.

Sampling Location : AAQ-2, H.B.Colony

**Analysis Report** 

Date of Sampling	Concentration	on of Pollutants		
	Methane HC μg/m³	Non Methane HC µg/m³		
04/11/2024	ND	ND		
07/11/2024	ND	ND		
11/11/2024	ND	ND		
14/11/2024	ND	ND		
18/11/2024	ND ND			
21/11/2024	ND	ND		
25/11/2024	ND	ND		
28/11/2024	ND	ND		
No. of Observation	8	8		
Minimum	-	-		
Maximum	•	-		
Average		-		
NAAQM Standards	•	-		
Test Method (P-11)		IS:5182 (P-11)		

Remark



Post Vikrampur, Distt. Angul-759 106

Odisha, India

ULR No .:

TC148142400000102F,133F,235F, 263F,319F,399F,457F,540F

Test Report Date: 09/12/2024

Sample Particulars

Nature of the Sample **Ambient Air Quality Monitoring** 

Purpose of Monitoring To Check the Pollution Load

Method of Sampling : IS 5182 (Part 14) Monitoring Conducted By : Mr. Manas Satapathy

Sampling Duration (Hrs.) : 24 Hrs.

Sampling Location : AAQ-3, TFL Guest House

**Analysis Report** 

Date of Sampling	Concentration of Pollutants						
	Particulate Matter (PM2.5) µg/m <sup>3</sup>	Particulate Matter (PM10) µg/m <sup>3</sup>	Sulphur Dioxide (as SO2) µg/m <sup>3</sup>	Nitrogen Dioxide (as NO2) μg/m <sup>3</sup>	Ammonia (as NH3) μg/m <sup>3</sup>	VOCs, μg/m³	
04/11/2024	24.80	45.20	13.40	17.20	14.30	ND	
07/11/2024	23.50	44.20	14.20	18.30	13.20	ND	
11/11/2024	25.50	42.50	11.80	15.30	17.30	ND	
14/11/2024	22.90	40.20	12.50	16.30	14.90	ND	
18/11/2024	25.50	42.20	14.30	17.10	16.30	ND	
21/11/2024	21.80	44.60	13.70	18.00	15.30	ND	
25/11/2024	23.60	45.30	13.20	17.40	18.40	ND	
28/11/2024	24.50	36.90	11.10	15.10	14.30	ND	
No. of Observation	8	8	8	8	8	8	
Minimum	21.80	36.90	11.10	15.10	13.20		
Maximum	25.50	45.30	14.30	18.30	18.40	_	
Average	24.01	42.64	13.03	16.84	15.50	_	
NAAQM Standards	60	100	80	80	400	-	
Test Method	40CFR Appendix L Part 53 CPCB Guidelines	IS:5182 (P-23)	IS:5182 (P-2)	IS:5182 (P-6)	Method of Air Sampling & Analysis	SOP No. NL/SOP/A/ Q/VOC/ 0	



Post Vikrampur, Distt. Angul-759 106

Odisha, India

Test Report No.:

NL/2024/TFL/11/103

Test Report Date: 09/12/2024

**Concentration of Pollutants** 

Sample Particulars

Date of Sampling

Nature of the Sample : Ambient Air Quality Monitoring

Purpose of Monitoring : To Check the Pollution Load

Method of Sampling : IS 5182 (Part 14)

Monitoring Conducted By : Mr. Manas Satapathy

Sampling Duration (Hrs.) : 24 Hrs.

Sampling Location : AAQ-3, TFL Guest House

Methane HC Non Methane HC µg/m³ µg/m³ 04/11/2024 ND ND 07/11/2024 ND ND 11/11/2024 ND ND 14/11/2024 ND ND 18/11/2024

**Analysis Report** 

18/11/2024	ND	ND
21/11/2024	ND	ND
25/11/2024	ND	ND
28/11/2024	ND	ND
No. of Observation	8	8
Minimum		-
Maximum		-
Average	*	•
NAAQM Standards	•	•
Test Method	IS:5182 (P-11)	IS:5182 (P-11)

Remark



Post Vikrampur, Distt. Angul-759 106

Odisha, India

ULR No .:

TC148142400000103F,134F,236F, 264F,320F,400F,458F,541F

Test Report Date: 09/12/2024

Sample Particulars

Nature of the Sample

Purpose of Monitoring Method of Sampling

Monitoring Conducted By

Sampling Duration (Hrs.)

Sampling Location

**Ambient Air Quality Monitoring** 

To Check the Pollution Load

: IS 5182 (Part 14)

: Mr. Manas Satapathy

: 24 Hrs.

: AAQ-4,Balanda House

**Analysis Report** 

Date of Sampling			Concentration of Po	llutants		
	Particulate Matter (PM2.5) µg/m <sup>3</sup>	Particulate Matter (PM10) µg/m³	Sulphur Dioxide (as SO2) µg/m³	Nitrogen Dioxide (as NO2) μg/m <sup>3</sup>	Ammonia (as NH3) µg/m³	VOCs, μg/m³
04/11/2024	15.30	38.20	12.80	15.10	13.60	ND
07/11/2024	16.90	34.20	11.60	17.30	11.60	ND
11/11/2024	17.60	35.10	13.30	15.80	10.30	ND
14/11/2024	14.20	33.60	14.60	17.90	12.40	ND
18/11/2024	16.50	35.80	12.30	19.30	13.20	ND
21/11/2024	15.30	36.00	13.90	16.80	14.60	ND
25/11/2024	17.60	40.10	14.00	17.80	11.20	ND
28/11/2024	18.20	35.20	12.10	16.90	10.90	ND
No. of Observation	8	8	8	8	8	8
Minimum	14.20	33.60	11.60	15.10	10.30	
Maximum	18.20	40.10	14.60	19.30	14.60	-
Average	16.45	36.03	13.08	17.11	12.23	-
NAAQM Standards	60	100	80	80	400	-
Test Method	40CFR Appendix L Part 53 CPCB Guidelines	IS:5182 (P-23)	IS:5182 (P-2)	IS:5182 (P-6)	Method of Air Sampling & Analysis	SOP No. NL/SOP/A Q /VOC/ 0



Post Vikrampur, Distt. Angul-759 106

Odisha, India

Test Report No .:

NL/2024/TFL/11/104

Test Report Date:

09/12/2024

Sample Particulars

Nature of the Sample

Purpose of Monitoring

Method of Sampling Monitoring Conducted By

Sampling Duration (Hrs.)

Sampling Location

**Ambient Air Quality Monitoring** 

To Check the Pollution Load

IS 5182 (Part 14)

: Mr. Manas Satapathy

24 Hrs.

AAQ-4,Balanda House

**Analysis Report** 

Date of Sampling	Concentration	on of Pollutants
	Methane HC µg/m³	Non Methane HC μg/m³
04/11/2024	ND	ND
07/11/2024	ND	ND
11/11/2024	ND	ND
14/11/2024 ND		ND
18/11/2024	ND	ND
21/11/2024	ND	ND
25/11/2024	ND	ND
28/11/2024	ND	ND
No. of Observation	8	8
Minimum	-	-
Maximum		-
Average		-
NAAQM Standards	:-	-
Test Method	IS:5182 (P-11)	IS:5182 (P-11)



Post Vikrampur, Distt. Angul-759 106

Odisha, India

ULR No .:

TC148142400000104F,135F,237F, 265F,321F,401F,459F,542F

Test Report Date: 09/12/2024

Sample Particulars

Nature of the Sample Purpose of Monitoring

Method of Sampling Monitoring Conducted By

Sampling Duration (Hrs.)

Sampling Location

**Ambient Air Quality Monitoring** 

To Check the Pollution Load

IS 5182 (Part 14)

: Mr. Manas Satapathy 24 Hrs.

AAQ-5, Karnapur Village

**Analysis Report** 

Date of Sampling			Concentration of Po	llutants		
	Particulate Matter (PM2.5) µg/m <sup>3</sup>	Particulate Matter (PM10) μg/m <sup>3</sup>	Sulphur Dioxide (as SO2) µg/m <sup>3</sup>	Nitrogen Dioxide (as NO2) µg/m³	Ammonia (as NH3) µg/m³	VOCs, μg/m³
04/11/2024	21.40	40.50	13.20	18.20	13.20	ND
07/11/2024	23.30	43.80	12.80	19.40	12.40	ND
11/11/2024	22.50	39.30	13.40	18.10	14.70	ND
14/11/2024	25.50	42.30	11.90	17.40	11.90	ND
18/11/2024	26.40	38.30	12.50	20.30	10.80	ND
21/11/2024	28.50	37.60	13.70	19.40	14.50	ND
25/11/2024	27.20	44.20	14.50	15.60	18.60	ND
28/11/2024	25.80	41.70	15.20	20.30	15.40	ND
No. of Observation	8	8	8	8	8	8
Minimum	21.40	37.60	11.90	15.60	10.80	
Maximum	28.50	44.20	15.20	20.30	18.60	-
Average	25.08	40.96	13.40	18.59	13.94	
NAAQM Standards	60	100	80	80	400	-
Test Method	40CFR Appendix L Part 53 CPCB Guidelines	IS:5182 (P-23)	IS:5182 (P-2)	IS:5182 (P-6)	Method of Air Sampling & Analysis	SOP No. NL/SOP/A Q /VOC/ 0



Post Vikrampur, Distt. Angul-759 106

Odisha, India

Test Report No.:

NL/2024/TFL/11/105

Test Report Date: 09/12/2024

Sample Particulars

Nature of the Sample

Purpose of Monitoring

Method of Sampling Monitoring Conducted By

Sampling Duration (Hrs.)

Sampling Location

**Ambient Air Quality Monitoring** 

: To Check the Pollution Load

: IS 5182 (Part 14)

: Mr. Manas Satapathy

: 24 Hrs.

AAQ-5,Karnapur Village

**Analysis Report** 

Date of Sampling	Analysis Report  Concentration	on of Pollutants
	Methane HC μg/m³	Non Methane HC μg/m <sup>3</sup>
04/11/2024	ND	ND
07/11/2024	ND	ND
11/11/2024 ND		ND
14/11/2024 ND		ND
18/11/2024 ND		ND
21/11/2024	ND	ND
25/11/2024	ND	ND
28/11/2024	ND	ND
No. of Observation	8	8
Minimum		
Maximum		-
Average		-
NAAQM Standards	-	-
Test Method	IS:5182 (P-11)	IS:5182 (P-11)



Post Vikrampur, Distt. Angul-759 106

Odisha, India

ULR No .:

TC148142400000105F,136F,238F, 266F,322F,402F,460F,543F Test Report Date:

09/12/2024

Sample Particulars

Nature of the Sample

Purpose of Monitoring

Method of Sampling Monitoring Conducted By

Sampling Duration (Hrs.) Sampling Location

**Ambient Air Quality Monitoring** 

To Check the Pollution Load

IS 5182 (Part 14)

: Mr. Manas Satapathy

: 24 Hrs.

: AAQ-6, Kukudanga Village

Date of Sampling		Analysis R	Concentration of Po	llutants		
	Particulate Matter (PM2.5) μg/m³	Particulate Matter (PM10) µg/m <sup>3</sup>	Sulphur Dioxide (as SO2) µg/m³	Nitrogen Dioxide (as NO2) µg/m³	Ammonia (as NH3) µg/m³	VOCs, µg/m³
04/11/2024	20.00	33.50	15.70	19.20	13.40	ND
07/11/2024	23.50	34.60	14.20	18.30	12.20	ND
11/11/2024	18.60	37.70	16.70	19.80	11.20	ND
14/11/2024	16.40	36.20	17.40	20.10	12.80	ND
18/11/2024	18.00	34.20	16.90	19.20	13.50	ND
21/11/2024	16.70	35.50	17.20	20.50	14.80	ND
25/11/2024	17.90	36.60	14.20	18.10	15.50	ND
28/11/2024	18.90	33.20	15.10	19.00	15.10	ND
No. of Observation	8	8	8	8	8	8
Minimum	16.40	33.2	14.20	18.10	11.20	
Maximum	23.50	37.70	17.40	20.50	15.50	
Average	18.75	35.19	15.93	19.28	13.56	
NAAQM Standards	60	100	80	80	400	
Test Method	40CFR Appendix L Part 53 CPCB Guidelines	IS:5182 (P-23)	IS:5182 (P-2)	IS:5182 (P-6)	Method of Air Sampling & Analysis	SOP No. NL/SOP/A/ Q /VOC/ 01



Test Report No.:

NL/2024/TFL/11/106

Post Vikrampur, Distt. Angul-759 106 Odisha, India

Test Report Date:

09/12/2024

Sample Particulars

Nature of the Sample Purpose of Monitoring

**Ambient Air Quality Monitoring** To Check the Pollution Load

Method of Sampling Monitoring Conducted By

IS 5182 (Part 14) Mr. Manas Satapathy

Sampling Duration (Hrs.)

24 Hrs.

Sampling Location

AAQ-6,Kukudanga Village

**Analysis Report** 

Date of Sampling	Concentration	on of Pollutants
	Methane HC μg/m³	Non Methane HC µg/m³
04/11/2024	ND	ND
07/11/2024 ND 11/11/2024 ND		ND
		ND
14/11/2024 ND		ND
18/11/2024	ND	ND
21/11/2024	ND	ND
25/11/2024	ND	ND
28/11/2024	ND	ND
No. of Observation	8	8
Minimum		-
Maximum	·	-
Average		-
NAAQM Standards	-	-
Test Method	IS:5182 (P-11)	IS:5182 (P-11)



Post Vikrampur, Distt. Angul-759 106

Odisha, India

ULR No.:

TC148142400000624F,720F,792F,858F,941F,990F,1129F, 1206F

Test Report Date: 02/01/2025

Sample Particulars

Nature of the Sample

Purpose of Monitoring

Method of Sampling Monitoring Conducted By Sampling Duration (Hrs.)

Sampling Location

Ambient Air Quality Monitoring

To Check the Pollution Load

IS 5182 (Part 14)

Mr. Manas Satapathy

24 Hrs.

AAQ-1, TFL Admin Building

**Analysis Report** 

Date of Sampling			Concentration of Po	llutants		
	Particulate Matter (PM2.5) µg/m³	Particulate Matter (PM10) µg/m <sup>3</sup>	Sulphur Dioxide (as SO2) µg/m <sup>3</sup>	Nitrogen Dioxide (as NO2) μg/m <sup>3</sup>	Ammonia (as NH3) μg/m³	VOCs, µg/m <sup>3</sup>
02/12/2024	24.00	53.20	22.20	24.30	19.40	ND
05/12/2024	23.10	50.50	23.20	26.30	17.00	ND
09/12/2025	26.50	54.40	21.50	23.20	17.30	ND
12/12/2024	24.00	49.20	18.12	22.40	19.00	ND
16/12/2024	23.50	51.20	20.40	23.10	20.27	ND
19/12/2024	24.80	55.20	18.12	22.10	18.30	ND
23/12/2024	23.10	54.30	20.50	23.00	19.60	ND
26/12/2024	26.00	54.80	20.10	25.00	19.00	ND
No. of Observation	8	8	8	8	8	8
Minimum	23.10	49.20	18.12	22.10	17.00	
Maximum	26.50	55.20	23.20	26.30	20.27	
Average	24.38	52.85	20.52	23.68	18.73	
NAAQM Standards	60	100	80	80	400	-
Test Method	40CFR Appendix L Part 53 CPCB Guidelines	IS:5182 (P-23)	IS:5182 (P-2)	IS:5182 (P-6)	Method of Air Sampling & Analysis	SOP No. NL/SOP/AA Q/VOC/ 01



Test Report No .:

NL/2024/TFL/12/101 ·

Post Vikrampur, Distt. Angul-759 106 Odisha, India

Test Report Date: 02/01/2025

Sample Particulars

Sampling Location

Nature of the Sample **Ambient Air Quality Monitoring** Purpose of Monitoring

To Check the Pollution Load

Method of Sampling Monitoring Conducted By

IS 5182 (Part 14) : Mr. Manas Satapathy

Sampling Duration (Hrs.) 24 Hrs.

AAQ-1, TFL Admin Building

**Analysis Report** 

Date of Sampling	Analysis Report  Concentration	on of Pollutants
	Methane HC μg/m³	Non Methane HC µg/m³
02/12/2024	ND	ND
05/12/2024 ND 09/12/2025 ND		ND
		ND
12/12/2024 ND		ND
16/12/2024 ND		ND
19/12/2024	ND	ND
23/12/2024	ND	ND
26/12/2024	ND	ND
No. of Observation	8	8
Minimum	(#)	- ,
Maximum	-	-
Average	*	-
NAAQM Standards	(=)	-
Test Method	IS:5182 (P-11)	IS:5182 (P-11)



Post Vikrampur, Distt. Angul-759 106

Odisha, India

ULR No .:

TC148142400000625F,721F,793F,859F,942F,991F,1130F, 1207F

Test Report Date: 02/01/2025

Sample Particulars

Nature of the Sample

**Ambient Air Quality Monitoring** 

Purpose of Monitoring

To Check the Pollution Load

Method of Sampling Monitoring Conducted By IS 5182 (Part 14) Mr. Manas Satapathy

Sampling Duration (Hrs.)

24 Hrs.

Sampling Location

AAQ-2, H.B.Colony

**Analysis Report** 

Date of Sampling			Concentration of Po	llutants		
	Particulate Matter (PM2.5) µg/m³	Particulate Matter (PM10) µg/m <sup>3</sup>	Sulphur Dioxide (as SO2) µg/m³	Nitrogen Dioxide (as NO2) μg/m <sup>3</sup>	Ammonia (as NH3) µg/m³	VOCs, μg/m³
02/12/2024	26.50	44.50	17.60	20.20	15.04	ND
05/12/2024	28.20	38.80	15.30	18.20	17.70	ND
09/12/2025	25.20	47.00	15.20	19.30	18.30	ND
12/12/2024	23.00	43.10	13.30	17.90	19.30	ND
16/12/2024	25.60	46.20	15.40	19.00	16.02	ND
19/12/2024	25.20	40.70	15.30	20.20	15.60	ND
23/12/2024	26.07	45.50	17.20	17.90	16.00	ND
26/12/2024	28.60	44.40	18.12	20.40	19.40	ND
No. of Observation	8	8	8	8	8	8
Minimum	23.00	38.80	13.30	17.90	15.04	_
Maximum	28.60	47.00	18.12	20.40	19.40	_
Average	26.05	43.78	15.93	19.14	17.17	-
NAAQM Standards	60	100	80	80	400	-
Test Method	40CFR Appendix L Part 53 CPCB Guidelines	IS:5182 (P-23)	IS:5182 (P-2)	IS:5182 (P-6)	Method of Air Sampling & Analysis	SOP No. NL/SOP/A/ Q /VOC/ 01



Post Vikrampur, Distt. Angul-759 106 Test

Odisha, India

Test Report No.:

NL/2024/TFL/12/102

Test Report Date: 02/0

02/01/2025

Sample Particulars

Nature of the Sample : Ambient Air Quality Monitoring
Purpose of Monitoring : To Check the Pollution Load

Method of Sampling : IS 5182 (Part 14)

Monitoring Conducted By : Mr. Manas Satapathy

Sampling Duration (Hrs.) : 24 Hrs.

Sampling Location : AAQ-2, H.B.Colony

Date of Sampling	Analysis Report  Concentration of Pollutants				
Date of Sampling	Concentration	on of Pollutants			
	Methane HC μg/m³	Non Methane HC μg/m³			
02/12/2024	ND	ND			
05/12/2024 ND 09/12/2025 ND		ND			
		ND			
12/12/2024 ND		ND			
16/12/2024 ND		ND			
19/12/2024	ND	ND			
23/12/2024	ND	ND			
26/12/2024	ND	ND			
No. of Observation	8	8			
Ainimum		-			
Maximum					
Average	•	-			
IAAQM Standards		-			
est Method	IS:5182 (P-11)	IS:5182 (P-11)			

Remark:



Post Vikrampur, Distt. Angul-759 106

Odisha, India

ULR No.:

TC148142400000626F,722F,794F,860F,943F,992F,1131F, 1208F

Test Report Date: 02/01/2025

Sample Particulars

Nature of the Sample

Purpose of Monitoring Method of Sampling Monitoring Conducted By

Sampling Duration (Hrs.) Sampling Location : Ambient Air Quality Monitoring

To Check the Pollution Load

: IS 5182 (Part 14)

Mr. Manas Satapathy

24 Hrs.

: AAQ-3, TFL Guest House

**Analysis Report** 

Date of Sampling			Concentration of Po	llutants		
	Particulate Matter (PM2.5) µg/m <sup>3</sup>	Particulate Matter (PM10) µg/m <sup>3</sup>	Sulphur Dioxide (as SO2) µg/m <sup>3</sup>	Nitrogen Dioxide (as NO2) μg/m <sup>3</sup>	Ammonia (as NH3) µg/m³	VOCs, µg/m³
02/12/2024	28.60	49.20	17.40	20.20	17.30	ND
05/12/2024	27.40	48.20	18.12	21.20	16.20	ND
09/12/2025	29.50	46.50	14.80	19.20	20.30	ND
12/12/2024	26.50	44.20	16.45	19.60	17.90	ND
16/12/2024	29.50	45.20	17.30	20.10	19.30	ND
19/12/2024	25.60	48.60	17.70	22.20	18.30	ND
23/12/2024	27.60	49.30	17.20	21.34	21.40	ND
26/12/2024	28.20	40.90	15.20	18.03	18.30	ND
No. of Observation	8	8	8	8	8	8
Minimum	25.60	40.90	14.80	18.03	16.20	
Maximum	29.50	49.30	18.12	22.20	21.40	-
Average	27.86	46.51	16.77	20.23	18.63	-
NAAQM Standards	60	100	80	80	400	-
Test Method	40CFR Appendix L Part 53 CPCB Guidelines	IS:5182 (P-23)	IS:5182 (P-2)	IS:5182 (P-6)	Method of Air Sampling & Analysis	SOP No. NL/SOP/AA Q/VOC/ 01

mark: NAAQS: National Ambient Air Quality Standards; Schedule-VII, [Rule 3 (38)], [Part-II-sec.-3(i)] 16.11.2009, ND-Not Detected,

Authorised M

Post Vikrampur, Distt. Angul-759 106

Odisha, India

Test Report No.:

NL/2024/TFL/12/103

Test Report Date: 02/01/2025

Sample Particulars

Nature of the Sample

Purpose of Monitoring

Method of Sampling Monitoring Conducted By

Sampling Duration (Hrs.)
Sampling Location

: Ambient Air Quality Monitoring

To Check the Pollution Load

IS 5182 (Part 14)

Mr. Manas Satapathy

24 Hrs.

AAQ-3, TFL Guest House

Analysis Report

Date of Sampling	Concentration of Pollutants		
	Methane HC µg/m³	Non Methane HC µg/m³	
02/12/2024	ND	ND	
05/12/2024	ND	ND	
09/12/2025	ND	ND	
12/12/2024	ND	ND	
16/12/2024	ND	ND	
19/12/2024	ND	ND	
23/12/2024	ND	ND	
26/12/2024	ND	ND	
No. of Observation	8	8	
Minimum	-	-	
Maximum		•	
Average	rerage -		
NAAQM Standards	-	•	
Test Method	IS:5182 IS:5182 st Method (P-11) (P-11)		

Remark:



Post Vikrampur, Distt. Angul-759 106

Odisha, India

ULR No .:

TC148142400000627F,723F,795F,861F,944F,993F,1132F, 1209F

Test Report Date: 02/01/2025

Sample Particulars

Nature of the Sample

Purpose of Monitoring

Method of Sampling Monitoring Conducted By

Sampling Duration (Hrs.)

Sampling Location

: Ambient Air Quality Monitoring

To Check the Pollution Load

: IS 5182 (Part 14)

Mr. Manas Satapathy

24 Hrs.

: AAQ-4,Balanda House

**Analysis Report** 

Date of Sampling	Concentration of Pollutants						
	Particulate Matter (PM2.5) µg/m³	Particulate Matter (PM10) µg/m <sup>3</sup>	Sulphur Dioxide (as SO2) µg/m <sup>3</sup>	Nitrogen Dioxide (as NO2) µg/m <sup>3</sup>	Ammonia (as NH3) µg/m³	VOCs, μg/m <sup>3</sup>	
02/12/2024	19.23	42.20	16.80	18.08	15.80	ND	
05/12/2024	20.90	38.20	15.40	20.30	14.60	ND	
09/12/2025	21.60	39.10	17.30	18.80	13.30	ND	
12/12/2024	18.00	37.40	17.90	20.30	15.40	ND	
16/12/2024	21.40	39.80	15.20	22.23	16.20	ND	
19/12/2024	19.23	40.20	17.20	19.70	16.60	ND	
23/12/2024	21.37	44.40	18.00	20.80	14.20	ND	
26/12/2024	22.20	39.20	16.35	19.90	14.90	ND	
No. of Observation	8	8	8	8	8	8	
Minimum	18.00	37.40	15.20	18.08	13.30		
Maximum	22.20	44.40	18.00	22.23	16.60	-	
Average	20.49	40.06	16.77	20.01	15.13		
NAAQM Standards	60	100	80	80	400		
Test Method	40CFR Appendix L Part 53 CPCB Guidelines	IS:5182 (P-23)	IS:5182 (P-2)	IS:5182 (P-6)	Method of Air Sampling & Analysis	SOP No. NL/SOP/AA Q /VOC/ 01	

Remark:



Post Vikrampur, Distt. Angul-759 106

Odisha, India

Test Report No.:

NL/2024/TFL/12/104

Test Report Date:

02/01/2025

Sample Particulars

Nature of the Sample

Purpose of Monitoring

Method of Sampling Monitoring Conducted By

Sampling Duration (Hrs.) Sampling Location : Ambient Air Quality Monitoring

To Check the Pollution Load

IS 5182 (Part 14)

Mr. Manas Satapathy

: 24 Hrs.

: AAQ-4,Balanda House

Analysis Report

Date of Sampling	Concentration of Pollutants		
	Methane HC µg/m³	Non Methane HC μg/m <sup>3</sup>	
02/12/2024	ND	ND	
05/12/2024	ND	ND	
09/12/2025	ND	ND	
12/12/2024	ND	ND	
16/12/2024	ND	ND	
19/12/2024	ND	ND	
23/12/2024	ND	ND	
26/12/2024	ND	ND	
No. of Observation	8	8	
Minimum	-	-	
Maximum -		•	
Average	( e	•	
NAAQM Standards	2=3	•	
Test Method	IS:5182 (P-11)	IS:5182 (P-11)	

Remark:



NAAQS: National Ambient Air Quality Standards; Schedule-VII, [Rule 3 (3B)], [Part-II-sec.-3(i)] 16.11.2009, ND-Not Detected,

ULR No .:

TC148142400000628F,724F,796F,862F,945F,994F,1133F, 1210F

Post Vikrampur, Distt. Angul-759 106 Odisha, India

Test Report Date:

02/01/2025

Sample Particulars

Nature of the Sample

**Ambient Air Quality Monitoring** 

Purpose of Monitoring

To Check the Pollution Load

Method of Sampling

IS 5182 (Part 14)

Monitoring Conducted By

Mr. Manas Satapathy

Sampling Duration (Hrs.)

24 Hrs.

Sampling Location

AAQ-5,Karnapur Village

**Analysis Report** 

Date of Sampling	Concentration of Pollutants						
	Particulate Matter (PM2.5) µg/m <sup>3</sup>	Particulate Matter (PM10) μg/m³	Sulphur Dioxide (as SO2) µg/m <sup>3</sup>	Nitrogen Dioxide (as NO2) μg/m <sup>3</sup>	Ammonia (as NH3) µg/m³	VOCs, µg/m³	
02/12/2024	25.20	44.50	17.20	21.20	16.20	ND	
05/12/2024	27.00	47.50	16.60	23.40	16.40	ND	
09/12/2025	26.50	43.30	16.40	22.23	18.70	ND	
12/12/2024	29.50	45.30	14.90	20.40	14.90	ND	
16/12/2024	30.34	42.30	15.42	23.40	13.80	ND	
19/12/2024	32.50	41.50	17.60	23.50	17.50	ND	
23/12/2024	31.20	48.20	17.90	18.50	21.60	ND	
26/12/2024	29.50	45.70	19.20	24.30	19.40	ND	
No. of Observation	8	8	8	8	8	8	
Minimum	25.20	41.50	14.90	18.50	13.80		
Maximum	32.50	48.20	19.20	24.30	21.60	-	
Average	28.97	44.79	16.90	22.12	17.31	-	
NAAQM Standards	60	100	80	80	400	-	
Test Method	40CFR Appendix L Part 53 CPCB Guidelines	IS:5182 (P-23)	IS:5182 (P-2)	IS:5182 (P-6)	Method of Air Sampling & Analysis	SOP No. NL/SOP/A/ Q/VOC/ 0	



Post Vikrampur, Distt. Angul-759 106

Odisha, India

Test Report No.:

NL/2024/TFL/12/105

Test Report Date: 02/01/2025

Sample Particulars

Nature of the Sample

Purpose of Monitoring Method of Sampling

Monitoring Conducted By Sampling Duration (Hrs.)

Sampling Location

: Ambient Air Quality Monitoring

To Check the Pollution Load

IS 5182 (Part 14)

Mr. Manas Satapathy

24 Hrs.

AAQ-5,Karnapur Village

Analysis Report

Date of Sampling	Concentration of Pollutants		
	Methane HC µg/m³	Non Methane HC μg/m³	
02/12/2024	ND	ND	
05/12/2024	ND	ND	
09/12/2025	ND	ND	
12/12/2024	ND	ND	
16/12/2024	ND	ND	
19/12/2024	ND	ND	
23/12/2024	ND	ND	
26/12/2024	ND	ND	
No. of Observation	8	8	
Minimum		-	
Maximum	-	-	
Average	-	-	
NAAQM Standards			
Test Method	IS:5182 (P-11)	IS:5182 (P-11)	

Remark:



<sup>\*</sup>NAAQS: National Ambient Air Quality Standards; Schedule-VII, [Rule 3 (3B)], [Part-II-sec.-3(i)] 16.11.2009, ND-Not Detected,

Post Vikrampur, Distt. Angul-759 106

Odisha, India

ULR No.:

TC148142400000629F,725F,797F,863F,946F,995F,1134F, 1211F

Test Report Date: 02/01/2025

Sample Particulars

Nature of the Sample

Purpose of Monitoring

Method of Sampling Monitoring Conducted By Sampling Duration (Hrs.)

Sampling Location

: Ambient Air Quality Monitoring

To Check the Pollution Load

: IS 5182 (Part 14)

Mr. Manas Satapathy

24 Hrs.

: AAQ-6,Kukudanga Village

**Analysis Report** 

Date of Sampling	Concentration of Pollutants						
	Particulate Matter (PM2.5) µg/m³	Particulate Matter (PM10) µg/m³	Sulphur Dioxide (as SO2) µg/m³	Nitrogen Dioxide (as NO2) μg/m <sup>3</sup>	Ammonia (as NH3) µg/m <sup>3</sup>	VOCs, μg/m <sup>3</sup>	
02/12/2024	24.00	37.60	19.70	21.20	17.40	ND	
05/12/2024	27.40	38.60	18.20	23.20	16.20	ND	
09/12/2025	22.20	41.70	20.70	22.70	15.20	ND	
12/12/2024	20.10	40.20	20.30	23.12	14.80	ND	
16/12/2024	21.80	38.20	19.90	24.60	17.50	ND	
19/12/2024	20.50	40.50	21.20	23.50	18.80	ND	
23/12/2024	21.80	41.60	18.12	22.50	18.50	ND	
26/12/2024	23.07	37.20	19.20	24.80	16.10	ND	
No. of Observation	8	8	8	8	8	8	
Minimum	20.10	37.20	18.12	21.20	14.80	-	
Maximum	27.40	41.70	21.20	24.80	18.80	-	
Average	22.61	39.45	19.67	23.20	16.81	-	
NAAQM Standards	60	100	80	80	400	-	
Test Method	40CFR Appendix L Part 53 CPCB Guidelines	IS:5182 (P-23)	IS:5182 (P-2)	IS:5182 (P-6)	Method of Air Sampling & Analysis	SOP No. NL/SOP/A/ Q/VOC/ 01	

temark:



Test Report No.:

NL/2024/TFL/12/106

Post Vikrampur, Distt. Angul-759 106 Odisha, India Test Report Date:

02/01/2025

Sample Particulars

Nature of the Sample
Purpose of Monitoring

: Ambient Air Quality Monitoring : To Check the Pollution Load

Method of Sampling

: IS 5182 (Part 14) : Mr. Manas Satapathy

Monitoring Conducted By Sampling Duration (Hrs.)

: 24 Hrs.

Sampling Location

: AAQ-6,Kukudanga Village

Analysis Report

Date of Sampling	Concentration of Pollutants		
	Methane HC µg/m³	Non Methane HC μg/m³	
02/12/2024	ND	ND	
05/12/2024	ND	ND	
09/12/2025	ND	ND	
12/12/2024	ND	ND	
16/12/2024	ND		
19/12/2024	ND	ND	
23/12/2024	ND	ND	
26/12/2024	ND	ND	
No. of Observation	of Observation 8		
Minimum		-	
Maximum	-	•	
Average			
NAAQM Standards			
Test Method	IS:5182 IS:5182 (P-11) (P-11)		

Remark:



Post Vikrampur, Distt. Angul-759 106

TC148142500000042F,99F,180F,224F,261F,330F,437F,497F

Odisha, India

Test Report Date:

ULR No .:

08/02/2025

Sample Particulars

Nature of the Sample Purpose of Monitoring

: Ambient Air Quality Monitoring

To Check the Pollution Load

Method of Sampling

: IS 5182 (Part 14)

Monitoring Conducted By

: Mr. Manas Satapathy

Sampling Duration (Hrs.)

24 Hrs.

Sampling Location

: AAQ-1, TFL Admin Building

**Analysis Report** 

Date of Sampling	Concentration of Pollutants							
	Particulate Matter (PM2.5) µg/m <sup>3</sup>	Particulate Matter (PM10) µg/m <sup>3</sup>	Sulphur Dioxide (as SO2) µg/m <sup>3</sup>	Nitrogen Dioxide (as NO2) μg/m <sup>3</sup>	Ammonia (as NH3) µg/m³	VOCs, μg/m <sup>3</sup>		
02/01/2025	22.20	51.60	20.40	23.40	18.20	ND		
06/01/2025	21.30	48.50	21.20	25.20	16.00	ND		
13/01/2025	22.60	47.20	17.20	21.40	18.40	ND		
16/01/2025	21.40	49.20	19.20	23.20	19.20	ND		
18/01/2025	23.90	53.20	17.40	21.80	17.60	ND		
20/01/2025	22.60	51.40	19.00	23.00	17.30	ND		
23/01/2025	20.60	52.20	20.40	26.00	19.50	ND		
27/01/2025	23.10	48.80	19.80	24.30	16.50	ND		
30/01/2025	21.80	49.60	17.00	23.80	17.00	ND		
No. of Observation	9	9	9	9	9	9		
Minimum	20.60	47.20	17.00	21.40	16.00	-		
Maximum	23.90	53.20	21.20	26.00	19.50	-		
Average	22.17	50.19	19.07	23.57	17.74	-		
NAAQM Standards	60	100	80	80	400	-		
Test Method	40CFR Appendix L Part 53 CPCB Guidelines	IS:5182 (P-23)	IS:5182 (P-2)	IS:5182 (P-6)	Method of Air Sampling & Analysis	SOP No. NL/SOP/A/ Q/VOC/ 0		



Post Vikrampur, Distt. Angul-759 106

Odisha, India

Test Report No.:

NL/2025/TFL/01/101

Test Report Date:

08/02/2025

Sample Particulars

Nature of the Sample

Purpose of Monitoring Method of Sampling

Monitoring Conducted By Sampling Duration (Hrs.)

Sampling Location

**Ambient Air Quality Monitoring** 

To Check the Pollution Load

IS 5182 (Part 14)

Mr. Manas Satapathy

24 Hrs.

AAQ-1, TFL Admin Building

**Analysis Report** 

Date of Sampling	Concentration	on of Pollutants		
	Methane HC µg/m³	Non-Methane HC µg/m³		
02/01/2025	ND	ND		
06/01/2025	ND	ND		
13/01/2025	ND	ND		
16/01/2025	ND	ND		
18/01/2025 ND		ND		
20/01/2025	ND	ND		
23/01/2025	ND	ND		
27/01/2025	ND	ND		
30/01/2025	ND	ND		
No. of Observation	9	9		
Minimum		-		
Maximum	-	=		
Average _				
NAAQM Standards	-	-		
Test Method	IS:5182 (P-11)	IS:5182 (P-11)		



Post Vikrampur, Distt. Angul-759 106

Odisha, India

ULR No .:

TC148142500000043F,100F,181F,225F,262F,331F,438F,498F

Test Report Date: 08/02/2025

Sample Particulars

Nature of the Sample Purpose of Monitoring

Method of Sampling Monitoring Conducted By Sampling Duration (Hrs.)

Sampling Location

: Ambient Air Quality Monitoring

To Check the Pollution Load

IS 5182 (Part 14) Mr. Manas Satapathy

24 Hrs.

: AAQ-2, H.B.Colony

**Analysis Report** 

Date of Sampling		Concentration of Pollutants							
	Particulate Matter (PM2.5) µg/m <sup>3</sup>	Particulate Matter (PM10) µg/m <sup>3</sup>	Sulphur Dioxide (as SO2) µg/m <sup>3</sup>	Nitrogen Dioxide (as NO2) μg/m <sup>3</sup>	Ammonia (as NH3) μg/m³	VOCs, μg/m³			
02/01/2025	24.40	42.50	15.60	19.20	14.50	ND			
06/01/2025	26.10	36.80	13.30	17.20	16.70	ND			
13/01/2025	21.40	41.20	12.40	16.90	18.40	ND			
16/01/2025	26.50	44.20	14.50	18.20	16.40	ND			
18/01/2025	23.50	38.70	14.30	19.40	14.60	ND			
20/01/2025	24.30	43.50	15.20	17.40	15.00	ND			
23/01/2025	22.60	42.80	13.30	15.10	16.40	ND			
27/01/2025	24.80	41.60	12.80	16.20	15.20	ND			
30/01/2025	25.20	43.70	16.60	17.80	16.00	ND			
No. of Observation	9	9	9	9	9	9			
Minimum	21.40	36.80	12.40	15.10	14.50	-			
Maximum	26.50	44.20	16.60	19.40	18.40	-			
Average	24.31	41.67	14.22	17.49	15.91				
NAAQM Standards	60	100	80	80	400	-			
Test Method	40CFR Appendix L Part 53 CPCB Guidelines	IS:5182 (P-23)	IS:5182 (P-2)	IS:5182 (P-6)	Method of Air Sampling & Analysis	SOP No. NL/SOP/A/ Q /VOC/ 0			



Test Report No.:

NL/2025/TFL/01/102

Post Vikrampur, Distt. Angul-759 106 Odisha, India Test Report Date:

08/02/2025

Sample Particulars

Nature of the Sample

: Ambient Air Quality Monitoring

Purpose of Monitoring

To Check the Pollution Load

Method of Sampling

: IS 5182 (Part 14)

Monitoring Conducted By

: Mr. Manas Satapathy

Sampling Duration (Hrs.)

: 24 Hrs.

Sampling Location

: AAQ-2, H.B.Colony

**Analysis Report** 

Date of Sampling	Concentration	on of Pollutants		
	Methane HC μg/m³	Non Methane HC µg/m³		
02/01/2025	ND	ND		
06/01/2025	ND	ND		
13/01/2025	ND	ND		
16/01/2025 ND		ND		
18/01/2025 ND		ND		
20/01/2025	ND	ND		
23/01/2025	ND	ND		
27/01/2025	ND	ND		
30/01/2025	ND	ND		
No. of Observation	9	9		
Minimum	-	-		
Maximum	*	-		
Average		-		
NAAQM Standards	-	•		
Test Method (P-11)		IS:5182 (P-11)		

Remark:



Post Vikrampur, Distt. Angul-759 106

Odisha, India

ULR No .:

Test Report Date:

TC148142500000044F,101F,182F,226F,263F,332F,439F,499F

08/02/2025

Sample Particulars

Nature of the Sample

Purpose of Monitoring Method of Sampling

Monitoring Conducted By

Sampling Duration (Hrs.)

Sampling Location

: Ambient Air Quality Monitoring

To Check the Pollution Load

: IS 5182 (Part 14)

: Mr. Manas Satapathy

: 24 Hrs.

: AAQ-3, TFL Guest House

**Analysis Report** 

Date of Sampling			Concentration of Po	llutants		
	Particulate Matter (PM2.5) µg/m³	Particulate Matter (PM10) µg/m <sup>3</sup>	Sulphur Dioxide (as SO2) µg/m <sup>3</sup>	Nitrogen Dioxide (as NO2) μg/m <sup>3</sup>	Ammonia (as NH3) µg/m³	VOCs, μg/m³
02/01/2025	26.90	47.20	15.40	19.20	15.40	ND
06/01/2025	25.50	46.40	16.20	20.30	16.20	ND
13/01/2025	24.80	42.20	14.50	18.30	17.00	ND
16/01/2025	27.20	44.20	16.40	19.40	18.20	ND
18/01/2025	23.90	46.60	15.80	20.60	17.60	ND
20/01/2025	25.60	47.60	15.90	19.60	20.20	ND
23/01/2025	22.90	45.10	13.90	21.10	18.90	ND
27/01/2025	25.20	42.80	14.20	18.50	17.50	ND
30/01/2025	23.10	45.60	13.50	17.90	16.50	ND
No. of Observation	9	9	9	9	9	9
Minimum	22.90	42.20	13.50	17.90	15.40	_
Maximum	27.20	47.60	16.40	21.10	20.20	_
Average	25.01	45.30	15.09	19.43	17.50	-
NAAQM Standards	60	100	80	80	400	-
Test Method	40CFR Appendix L Part 53 CPCB Guidelines	IS:5182 (P-23)	IS:5182 (P-2)	IS:5182 (P-6)	Method of Air Sampling & Analysis	SOP No. NL/SOP/AA Q /VOC/ 01



Test Report No.: Post Vikrampur, Distt. Angul-759 106 Test Report Date: NL/2025/TFL/01/103

08/02/2025

Odisha, India

Sample Particulars

Nature of the Sample **Ambient Air Quality Monitoring** 

Purpose of Monitoring To Check the Pollution Load

Method of Sampling IS 5182 (Part 14)

Monitoring Conducted By Mr. Manas Satapathy

Sampling Duration (Hrs.) 24 Hrs.

Sampling Location AAQ-3, TFL Guest House

Analysis Report

Date of Sampling	Concentration	on of Pollutants		
	Methane HC µg/m³	Non Methane HC μg/m³		
02/01/2025	ND	ND		
06/01/2025	ND	ND		
13/01/2025	ND	ND		
16/01/2025	ND	ND		
18/01/2025	ND	ND		
20/01/2025	ND	ND		
23/01/2025	ND	ND		
27/01/2025	ND	ND		
30/01/2025	ND	ND		
No. of Observation	9	9		
Minimum	16	-		
Maximum		-		
Average	5.€.	-		
NAAQM Standards	7=	-		
Test Method	IS:5182 (P-11)	IS:5182 (P-11)		



Post Vikrampur, Distt. Angul-759 106

Odisha, India

ULR No .:

TC148142500000045F,102F,183F,227F,264F,333F,440F,500F

Test Report Date: 08/02/2025

Sample Particulars

Nature of the Sample

Purpose of Monitoring Method of Sampling

Monitoring Conducted By

Sampling Duration (Hrs.) Sampling Location : Ambient Air Quality Monitoring

To Check the Pollution Load

: IS 5182 (Part 14)

Mr. Manas Satapathy

: 24 Hrs.

: AAQ-4,Balanda House

**Analysis Report** 

Date of Sampling		Concentration of Pollutants							
	Particulate Matter (PM2.5) µg/m³	Particulate Matter (PM10) µg/m <sup>3</sup>	Sulphur Dioxide (as SO2) µg/m <sup>3</sup>	Nitrogen Dioxide (as NO2) μg/m <sup>3</sup>	Ammonia (as NH3) μg/m³	VOCs, μg/m <sup>3</sup>			
02/01/2025	17.30	40.20	14.80	17.10	15.60	ND			
06/01/2025	18.80	36.30	13.60	19.30	13.60	ND			
13/01/2025	15.40	35.60	16.60	19.80	14.40	ND			
16/01/2025	18.80	37.80	14.30	21.30	15.20	ND			
18/01/2025	17.90	38.00	15.90	18.70	16.60	ND			
20/01/2025	19.20	42.20	16.00	19.80	13.20	ND			
23/01/2025	18.20	40.60	14.20	20.30	14.10	ND			
27/01/2025	15.80	41.50	15.10	17.40	12.20	ND			
30/01/2025	17.10	40.80	16.20	19.20	14.60	ND			
No. of Observation	9	9	9	9	9	9			
Minimum	15.40	35.60	13.60	17.10	12.20	-			
Maximum	19.20	42.20	16.60	21.30	16.60				
Average	17.61	39.22	15.19	19.21	14.39	-			
NAAQM Standards	60	100	80	80	400	-			
Test Method	40CFR Appendix L Part 53 CPCB Guidelines	IS:5182 (P-23)	IS:5182 (P-2)	IS:5182 (P-6)	Method of Air Sampling & Analysis	SOP No. NL/SOP/A/ Q/VOC/ 01			



Post Vikrampur, Distt. Angul-759 106

Odisha, India

Test Report No.:

NL/2025/TFL/01/104

Test Report Date: 08/02/2025

Sample Particulars

Nature of the Sample

Purpose of Monitoring Method of Sampling

Monitoring Conducted By Sampling Duration (Hrs.)

Sampling Location

: Ambient Air Quality Monitoring

To Check the Pollution Load

: IS 5182 (Part 14)

Mr. Manas Satapathy

: 24 Hrs.

: AAQ-4,Balanda House

Analysis Report

Date of Sampling	Analysis Report  Concentration	on of Pollutants
	Methane HC μg/m³	Non Methane HC µg/m³
02/01/2025	ND	ND
06/01/2025	ND	ND
13/01/2025	ND	ND
16/01/2025	ND	ND
18/01/2025	ND	ND
20/01/2025	ND	ND
23/01/2025	ND	ND
27/01/2025	ND	ND
30/01/2025	ND	ND
No. of Observation	9	9
Minimum	-	-
Maximum		-
Average		•
NAAQM Standards	-	-
Test Method	IS:5182 (P-11)	IS:5182 (P-11)



Post Vikrampur, Distt. Angul-759 106

ULR No .: Test Report Date: TC148142500000046F,103F,184F,228F,265F,334F,441F,501F

Odisha, India

08/02/2025

Sample Particulars

Nature of the Sample

**Ambient Air Quality Monitoring** To Check the Pollution Load

Purpose of Monitoring Method of Sampling

IS 5182 (Part 14)

Monitoring Conducted By

Mr. Manas Satapathy

Sampling Duration (Hrs.)

24 Hrs.

Sampling Location

AAQ-5,Karnapur Village

**Analysis Report** 

Date of Sampling	Concentration of Pollutants							
	Particulate Matter (PM2.5) µg/m <sup>3</sup>	Particulate Matter (PM10) μg/m <sup>3</sup>	Sulphur Dioxide (as SO2) µg/m <sup>3</sup>	Nitrogen Dioxide (as NO2) μg/m <sup>3</sup>	Ammonia (as NH3) µg/m³	VOCs, µg/m³		
02/01/2025	23.40	42.50	15.20	20.20	15.20	ND		
06/01/2025	25.30	45.80	14.80	21.40	14.40	ND		
13/01/2025	27.50	43.30	13.90	19.40	13.90	ND		
16/01/2025	28.40	40.30	14.50	22.30	12.80	ND		
18/01/2025	30.50	39.60	15.70	21.40	16.50	ND		
20/01/2025	29.20	46.20	16.70	17.60	20.60	ND		
23/01/2025	30.10	44.30	15.20	18.30	18.10	ND		
27/01/2025	28.80	36.20	16.20	20.80	14.20	ND		
30/01/2025	25.30	42.20	16.90	17.20	15.20	ND		
No. of Observation	9	9	9	9	9	9		
Minimum	23.40	36.20	13.90	17.20	12.80	-		
Maximum	30.50	46.20	16.90	22.30	20.60	-		
Average	27.61	42.27	15.46	19.84	15.66			
NAAQM Standards	60	100	80	80	400	-		
Test Method	40CFR Appendix L Part 53 CPCB Guidelines	IS:5182 (P-23)	IS:5182 (P-2)	IS:5182 (P-6)	Method of Air Sampling & Analysis	SOP No. NL/SOP/A/ Q /VOC/ 0		



Post Vikrampur, Distt. Angul-759 106

Odisha, India

Test Report No.:

NL/2025/TFL/01/105

Test Report Date: 08/02/2025

Sample Particulars

Nature of the Sample

Purpose of Monitoring Method of Sampling

Monitoring Conducted By Sampling Duration (Hrs.)

Sampling Location

: Ambient Air Quality Monitoring

To Check the Pollution Load

IS 5182 (Part 14)

Mr. Manas Satapathy

24 Hrs.

: AAQ-5,Kamapur Village

Analysis Report

Date of Sampling	Concentration	on of Pollutants		
	Methane HC µg/m³	Non Methane HC µg/m³		
02/01/2025	ND	ND		
06/01/2025	ND	ND		
13/01/2025	ND	ND		
16/01/2025 ND		ND		
18/01/2025 ND		ND		
20/01/2025	ND	ND		
23/01/2025 ND		ND		
27/01/2025	ND	ND		
30/01/2025	ND	ND		
No. of Observation	9	9		
Minimum		-		
Maximum	•	-		
Average		-		
NAAQM Standards	-	-		
Test Method	IS:5182 (P-11)	IS:5182 (P-11)		



Post Vikrampur, Distt. Angul-759 106 Odisha, India

ULR No.:

TC148142500000047F,104F,185F,229F,266F,335F,442F,502F

Test Report Date: 08/02/2025

Sample Particulars

Nature of the Sample

**Ambient Air Quality Monitoring** 

Purpose of Monitoring To Check the Pollution Load

Method of Sampling IS 5182 (Part 14)

Monitoring Conducted By Mr. Manas Satapathy Sampling Duration (Hrs.) 24 Hrs.

Sampling Location AAQ-6, Kukudanga Village

**Analysis Report** 

Date of Sampling	Concentration of Pollutants							
	Particulate Matter (PM2.5) µg/m³	Particulate Matter (PM10) µg/m <sup>3</sup>	Sulphur Dioxide (as SO2) µg/m³	Nitrogen Dioxide (as NO2) µg/m <sup>3</sup>	Ammonia (as NH3) µg/m³	VOCs, µg/m³		
02/01/2025	22.20	35.20	17.70	21.20	15.40	ND		
06/01/2025	25.40	36.60	16.20	20.30	14.20	ND		
13/01/2025	18.30	38.10	19.40	22.40	14.80	ND		
16/01/2025	20.90	36.20	18.90	21.30	15.60	ND		
18/01/2025	18.70	37.50	19.20	22.50	16.80	ND		
20/01/2025	19.80	38.60	16.50	20.50	17.50	ND		
23/01/2025	20.30	35.90	18.30	21.10	16.10	ND		
27/01/2025	18.20	36.80	17.50	20.80	14.60	ND		
30/01/2025	21.60	34.20	20.20	22.80	15.80	ND		
No. of Observation	9	9	9	9	9	9		
Minimum	18.20	34.20	16.20	20.30	14.20	-		
Maximum	25.40	38.60	20.20	22.80	17.50			
Average	20.60	36.57	18.21	21.43	15.64	-		
NAAQM Standards	60	100	80	80	400	-		
Test Method	40CFR Appendix L Part 53 CPCB Guidelines	IS:5182 (P-23)	IS:5182 (P-2)	IS:5182 (P-6)	Method of Air Sampling & Analysis	SOP No. NL/SOP/AA Q/VOC/ 01		



Post Vikrampur, Distt. Angul-759 106

Odisha, India

Test Report No .: NL/2025/TFL/01/106

Test Report Date: 08/02/2025

Sample Particulars

Nature of the Sample **Ambient Air Quality Monitoring** Purpose of Monitoring To Check the Pollution Load

Method of Sampling IS 5182 (Part 14) Monitoring Conducted By Mr. Manas Satapathy

Sampling Duration (Hrs.) 24 Hrs.

Sampling Location AAQ-6,Kukudanga Village

**Analysis Report** 

Date of Sampling	Concentration	on of Pollutants		
	Methane HC μg/m³	Non Methane HC μg/m³		
02/01/2025	ND	ND		
06/01/2025 ND		ND		
13/01/2025 ND		ND		
16/01/2025 ND		ND		
18/01/2025 ND		ND		
20/01/2025 ND		ND		
23/01/2025 ND		ND		
27/01/2025	ND	ND		
30/01/2025	ND	ND		
No. of Observation	9	9		
Minimum	-	-		
Maximum	*	( <del>-</del>		
Average	-	•		
NAAQM Standards	н	•		
Test Method	IS:5182 (P-11)	IS:5182 (P-11)		



Post Vikrampur, Distt. Angul-759 106

Odisha, India

ULR No .:

TC148142500000577F,659F,743F,809F,868F,1018F,1125F,1186F

Test Report Date: 06/03/2025

Sample Particulars

Nature of the Sample

Purpose of Monitoring

Method of Sampling Monitoring Conducted By

Sampling Duration (Hrs.)

Sampling Location

**Ambient Air Quality Monitoring** 

To Check the Pollution Load

IS 5182 (Part 14)

: Mr. Manas Satapathy

24 Hrs.

AAQ-1, TFL Admin Building

**Analysis Report** 

Date of Sampling	Concentration of Pollutants							
	Particulate Matter (PM2.5) µg/m³	Particulate Matter (PM10) µg/m³	Sulphur Dioxide (as SO2) µg/m³	Nitrogen Dioxide (as NO2) μg/m <sup>3</sup>	Ammonia (as NH3) µg/m³	VOCs, μg/m³		
03/02/2025	25.20	54.60	22.40	26.50	21.20	ND		
06/02/2025	24.30	51.20	24.20	28.20	19.20	ND		
10/02/2025	25.60	50.20	20.20	24.40	21.40	ND		
13/02/2025	24.40	52.20	21.20	26.20	20.20	ND		
17/02/2025	25.90	56.20	20.40	24.80	20.60	ND		
20/02/2025	25.20	54.40	22.00	26.00	19.50	ND		
23/02/2025	26.00	53.20	20.60	25.60	20.80	ND		
24/02/2025	26.10	51.80	22.70	27.30	20.00	ND		
27/02/2025	24.80	52.60	19.50	26.80	21.20	ND		
No. of Observation	9	9	9	9	9	9		
Minimum	24.30	50.20	19.50	24.40	19.20	_		
Maximum	26.10	56.20	24.20	28.20	21.40			
Average	25,28	52.93	21.47	26.20	20.46	-		
NAAQM Standards	60	100	80	80	400	-		
Test Method	40CFR Appendix L Part 53 CPCB Guidelines	IS:5182 (P-23)	IS:5182 (P-2)	IS:5182 (P-6)	Method of Air Sampling & Analysis	SOP No. NL/SOP/A AQ /VOC/		



Post Vikrampur, Distt. Angul-759 106

Odisha, India

Test Report No.:

NL/2025/TFL/02/101

Test Report Date: 06/03/2025

Sample Particulars

Nature of the Sample Purpose of Monitoring

Method of Sampling Monitoring Conducted By Sampling Duration (Hrs.)

Sampling Duration (Hrs Sampling Location : Ambient Air Quality Monitoring

To Check the Pollution Load

IS 5182 (Part 14)

Mr. Manas Satapathy

: 24 Hrs.

: AAQ-1, TFL Admin Building

Analysis Report

	Analysis Report				
Date of Sampling	Concentration	on of Pollutants			
	Methane HC μg/m³	Non-Methane HC µg/m³			
03/02/2025	ND	ND			
06/02/2025	ND	ND			
10/02/2025	ND	ND			
13/02/2025	ND	ND			
17/02/2025	ND	ND			
20/02/2025	ND	ND			
23/02/2025	ND	ND			
24/02/2025	ND	ND			
27/02/2025	ND	ND			
No. of Observation	9	9			
Minimum		-			
Maximum		-			
Average	-	-			
NAAQM Standards	-	-			
Test Method	IS:5182 (P-11)	IS:5182 (P-11)			



Post Vikrampur, Distt. Angul-759 106

Odisha, India

ULR No .: Test Report Date: TC148142500000578F,660F,744F,810F,869F,1019F,1126F,1187F

06/03/2025

Sample Particulars

Nature of the Sample

Purpose of Monitoring

Method of Sampling Monitoring Conducted By

Sampling Duration (Hrs.) Sampling Location

**Ambient Air Quality Monitoring** 

To Check the Pollution Load

IS 5182 (Part 14)

Mr. Manas Satapathy

24 Hrs.

AAQ-2, H.B.Colony

**Analysis Report** 

Date of Sampling	Concentration of Pollutants							
	Particulate Matter (PM2.5) µg/m³	Particulate Matter (PM10) µg/m³	Sulphur Dioxide (as SO2) µg/m³	Nitrogen Dioxide (as NO2) μg/m <sup>3</sup>	Ammonia (as NH3) µg/m³	VOCs, µg/m³		
03/02/2025	27.40	45.50	18.50	22.20	17.50	ND		
06/02/2025	29.10	39.80	16.30	20.20	19.70	ND		
10/02/2025	24.40	44.20	15.30	19.60	21.40	ND		
13/02/2025	29.50	47.20	17.50	21.20	19.40	ND		
17/02/2025	26.50	41.70	17.30	22.40	17.60	ND		
20/02/2025	27.40	46.50	18.20	20.40	18.00	ND		
23/02/2025	28.60	45.90	16.40	21.40	18.60	ND		
24/02/2025	27.80	44.60	15.80	19.20	18.20	ND		
27/02/2025	28.20	46.70	19.60	20.80	19.20	ND		
No. of Observation	9	9	9	9	9	9		
Minimum	24.40	39.80	15.30	19.20	17.50			
Maximum	29.50	47.20	19.60	22.40	21.40			
Average	27.66	44.68	17.21	20.82	18.84	-		
NAAQM Standards	60	100	80	80	400	-		
Test Method	40CFR Appendix L Part 53 CPCB Guidelines	IS:5182 (P-23)	IS:5182 (P-2)	IS:5182 (P-6)	Method of Air Sampling & Analysis	SOP No. NL/SOP/A AQ /VOC/ 01		



Post Vikrampur, Distt. Angul-759 106

Odisha, India

Test Report No.:

NL/2025/TFL/02/102

Test Report Date: 06/03/2025

Sample Particulars

Nature of the Sample **Ambient Air Quality Monitoring** Purpose of Monitoring To Check the Pollution Load

Method of Sampling IS 5182 (Part 14) Monitoring Conducted By Mr. Manas Satapathy

Sampling Duration (Hrs.) 24 Hrs.

Sampling Location AAQ-2, H.B.Colony

**Analysis Report** 

Date of Sampling	Concentration of Pollutants				
	Methane HC μg/m³	Non Methane HC µg/m³			
03/02/2025	ND	ND			
06/02/2025 ND		ND			
10/02/2025 ND		ND			
13/02/2025 ND		ND			
17/02/2025 ND		ND			
20/02/2025	ND	ND			
23/02/2025	ND .	ND			
24/02/2025	ND	ND			
27/02/2025	ND	ND			
No. of Observation	9	9			
Minimum		•			
Maximum		•			
Average	-	•			
NAAQM Standards					
Test Method	IS:5182 (P-11)	IS:5182 (P-11)			



Post Vikrampur, Distt. Angul-759 106

Odisha, India

ULR No .:

TC148142500000579F,661F,745F,811F,870F,1020F,1127F,1188F

Test Report Date: 06/03/2025

**Ambient Air Quality Monitoring** 

To Check the Pollution Load

Sample Particulars

Nature of the Sample

Purpose of Monitoring Method of Sampling

Monitoring Conducted By

Sampling Duration (Hrs.) Sampling Location

onitoring npling

> : Mr. Manas Satapathy : 24 Hrs.

: AAQ-3, TFL Guest House

IS 5182 (Part 14)

Analysis Report

Date of Sampling			Concentration of Po	llutants		
	Particulate Matter (PM2.5) µg/m³	Particulate Matter (PM10) µg/m³	Sulphur Dioxide (as SO2) µg/m³	Nitrogen Dioxide (as NO2) μg/m <sup>3</sup>	Ammonia (as NH3) µg/m³	VOCs, μg/m³
03/02/2025	29.90	50.00	18.40	21.20	18.40	ND
06/02/2025	28.60	49.60	19.20	23.20	19.20	ND
10/02/2025	27.80	45.30	17.50	21.80	20.00	ND
13/02/2025	30.30	46.20	19.40	22.40	21.20	ND
17/02/2025	26.90	49.60	18.80	23.60	20.60	ND
20/02/2025	28.60	40.60	18.90	22.80	23.20	ND
23/02/2025	27.30	46.30	16.80	20.90	20.50	ND
24/02/2025	28.20	45.80	17.20	21.50	19.50	ND
27/02/2025	26.40	48.60	16.50	20.90	20.10	ND
No. of Observation	9	9	9	9	9	9
Minimum	26.40	40.60	16.50	20.90	18.40	-
Maximum	30.30	50.00	19.40	23.60	23.20	-
Average	28.22	46.89	18.08	22.03	20.30	-
NAAQM Standards	60	100	80	80	400	
Test Method	40CFR Appendix L Part 53 CPCB Guidelines	IS:5182 (P-23)	IS:5182 (P-2)	IS:5182 (P-6)	Method of Air Sampling & Analysis	SOP No. NL/SOP/A AQ /VOC/ 01



Post Vikrampur, Distt. Angul-759 106

Odisha, India

Test Report No .:

NL/2025/TFL/02/103

Test Report Date: 06/03/2025

Sample Particulars

Nature of the Sample

Purpose of Monitoring

Method of Sampling Monitoring Conducted By

Sampling Duration (Hrs.)

Sampling Location

**Ambient Air Quality Monitoring** 

To Check the Pollution Load

IS 5182 (Part 14)

: Mr. Manas Satapathy

24 Hrs.

AAQ-3, TFL Guest House

**Analysis Report** 

Date of Sampling	Concentration	on of Pollutants
	Methane HC µg/m³	Non Methane HC μg/m³
03/02/2025	ND	ND
06/02/2025	ND	ND
10/02/2025	ND	ND
13/02/2025	ND	ND
17/02/2025	ND	ND
20/02/2025	ND	ND
23/02/2025	ND	ND
24/02/2025	ND	ND
27/02/2025	ND	ND
No. of Observation	9	9
Minimum	-	•
Maximum	-	-
Average	-	
NAAQM Standards		-
Test Method	IS:5182 (P-11)	IS:5182 (P-11)



Post Vikrampur, Distt. Angul-759 106

Odisha, India

ULR No.:

TC148142500000580F,662F,746F,812F,871F,1021F,1128F,1189F

Test Report Date: 06/03/2025

Sample Particulars

Nature of the Sample

Purpose of Monitoring

Method of Sampling Monitoring Conducted By Sampling Duration (Hrs.)

Sampling Location

**Ambient Air Quality Monitoring** 

To Check the Pollution Load

IS 5182 (Part 14)

: Mr. Manas Satapathy

: 24 Hrs.

AAQ-4,Balanda House

**Analysis Report** 

Date of Sampling	Concentration of Pollutants							
	Particulate Matter (PM2.5) µg/m³	Particulate Matter (PM10) µg/m³	Sulphur Dioxide (as SO2) µg/m³	Nitrogen Dioxide (as NO2) μg/m <sup>3</sup>	Ammonia (as NH3) µg/m³	VOCs, μg/m³		
03/02/2025	20.30	43.20	17.80	20.10	18.60	ND		
06/02/2025	21.60	39.30	16.60	22.30	16.60	ND		
10/02/2025	18.40	38.60	19.60	22.80	17.40	ND		
13/02/2025	21.80	40.80	17.30	24.30	18.20	ND		
17/02/2025	20.90	41.20	18.90	21.70	19.60	ND		
20/02/2025	22.50	45.20	19.00	22.50	16.20	ND		
23/02/2025	19.60	42.80	15.40	23.20	15.60	ND		
24/02/2025	18.80	44.50	18.20	20.40	15.20	ND		
27/02/2025	20.10	43.80	19.20	22.10	17.60	ND		
No. of Observation	9	9	9	9	9	9		
Minimum	18.40	38.60	15.40	20.10	15.20			
Maximum	22.50	45.20	19.60	24.30	19.60			
Average	20.44	42.16	18.00	22.16	17.22			
NAAQM Standards	60	100	80	80	400			
Test Method	40CFR Appendix L Part 53 CPCB Guidelines	IS:5182 (P-23)	IS:5182 (P-2)	IS:5182 (P-6)	Method of Air Sampling & Analysis	SOP No. NL/SOP/A AQ /VOC/		



Post Vikrampur, Distt. Angul-759 106

Odisha, India

Test Report No.:

NL/2025/TFL/02/104

Test Report Date:

06/03/2025

Sample Particulars

Nature of the Sample

Purpose of Monitoring Method of Sampling

Monitoring Conducted By Sampling Duration (Hrs.)

Sampling Location

**Ambient Air Quality Monitoring** 

To Check the Pollution Load

IS 5182 (Part 14)

: Mr. Manas Satapathy

24 Hrs.

AAQ-4,Balanda House

	Analysis Report	
Date of Sampling	Concentration	on of Pollutants
	Methane HC μg/m³	Non Methane HC µg/m³
03/02/2025	ND	ND
06/02/2025	ND	ND
10/02/2025	ND	ND
13/02/2025	ND	ND
17/02/2025	ND	ND
20/02/2025	ND	ND
23/02/2025	ND	ND
24/02/2025	ND	ND
27/02/2025	ND	ND
No. of Observation	9	9
Minimum		-
Maximum	- <u>-</u>	-
Average		-
NAAQM Standards	i en	-
Test Method	IS:5182 (P-11)	IS:5182 (P-11)



Post Vikrampur, Distt. Angul-759 106

Odisha, India

ULR No .:

TC148142500000581F,663F,747F,813F,872F,1022F,1129F,1190F

Test Report Date: 06/03/2025

Sample Particulars

Nature of the Sample

Purpose of Monitoring Method of Sampling

Monitoring Conducted By

Sampling Duration (Hrs.) Sampling Location : Ambient Air Quality Monitoring : To Check the Pollution Load

: IS 5182 (Part 14) : Mr. Manas Satapathy

: 24 Hrs.

: AAQ-5,Karnapur Village

Analysis Report

Date of Sampling		Concentration of Pollutants							
	Particulate Matter (PM2.5) µg/m³	Particulate Matter (PM10) μg/m³	Sulphur Dioxide (as SO2) µg/m³	Nitrogen Dioxide (as NO2) µg/m³	Ammonia (as NH3) µg/m³	VOCs, µg/m³			
03/02/2025	26.50	45.50	18.20	23.20	18.20	ND			
06/02/2025	28.20	48.50	17.80	24.40	17.40	ND			
10/02/2025	30.30	46.30	16.90	22.40	16.90	ND			
13/02/2025	31.20	43.30	17.50	25.30	15.80	ND			
17/02/2025	33.30	42.60	18.90	24.80	19.50	ND			
20/02/2025	32.50	49.20	19.70	20.60	23.60	ND			
23/02/2025	30.80	45.90	19.10	20.20	18.50	ND			
24/02/2025	31.60	39.20	19.20	23.80	17.20	ND			
27/02/2025	28.20	45.20	17.10	20.20	18.50	ND			
No. of Observation	9	9	9	9	9	9			
Minimum	26.50	39.20	16.90	20.20	15.80				
Maximum	33.30	49.20	19.70	25.30	23.60				
Average	30.29	45.08	18.27	22.77	18.40				
NAAQM Standards	60	100	80	80	400	-			
Test Method	40CFR Appendix L Part 53 CPCB Guidelines	IS:5182 (P-23)	IS:5182 (P-2)	IS:5182 (P-6)	Method of Air Sampling & Analysis	SOP No. NL/SOP/AQ /VOC			

Remark:



Post Vikrampur, Distt. Angul-759 106

Odisha, India

Test Report No .:

NL/2025/TFL/02/105

Test Report Date:

06/03/2025

Sample Particulars

Nature of the Sample

Purpose of Monitoring

Method of Sampling Monitoring Conducted By

Sampling Duration (Hrs.)

Sampling Location

**Ambient Air Quality Monitoring** 

To Check the Pollution Load

IS 5182 (Part 14)

Mr. Manas Satapathy

24 Hrs.

AAQ-5,Karnapur Village

**Analysis Report** 

Date of Sampling	Concentration	on of Pollutants
	Methane HC μg/m³	Non Methane HC µg/m³
03/02/2025	ND	ND
06/02/2025	ND	ND
10/02/2025 ND		ND
13/02/2025	ND	ND
17/02/2025	ND	ND
20/02/2025	ND	ND
23/02/2025	ND	ND
24/02/2025	ND	ND
27/02/2025	ND	ND
No. of Observation	9	9
Minimum		
Maximum	· ·	
Average		
NAAQM Standards	•	-
Test Method	IS:5182 (P-11)	IS:5182 (P-11)



Post Vikrampur, Distt. Angul-759 106

Odisha, India

ULR No .:

TC148142500000582F,664F,748F,814F,873F,1023F,1130F,1191F

Test Report Date: 06/03/2025

Sample Particulars

Nature of the Sample

Purpose of Monitoring Method of Sampling

Monitoring Conducted By

Sampling Duration (Hrs.) Sampling Location

**Ambient Air Quality Monitoring** 

To Check the Pollution Load

IS 5182 (Part 14)

Mr. Manas Satapathy

24 Hrs.

AAQ-6,Kukudanga Village

Date of Sampling		Concentration of Pollutants							
	Particulate Matter (PM2.5) µg/m³	Particulate Matter (PM10) μg/m³	Sulphur Dioxide (as SO2) μg/m³	Nitrogen Dioxide (as NO2) µg/m³	Ammonia (as NH3) µg/m³	VOCs, μg/m³			
03/02/2025	25.20	38.20	20.60	23.20	18.40	ND			
06/02/2025	28.20	39.60	19.20	22.30	17.20	ND			
10/02/2025	21.30	41.20	22.70	24.40	17.80	ND			
13/02/2025	23.90	39.20	21.80	23.40	18.60	ND			
17/02/2025	21.70	40.50	22.80	25.50	19.60	ND			
20/02/2025	22.60	41.60	19.50	23.80	20.50	ND			
23/02/2025	23.20	38.60	22.20	22.60	19.00	ND			
24/02/2025	21.80	39.80	19.90	23.60	17.60	ND			
27/02/2025	24.80	37.20	21.50	25.80	18.80	ND			
No. of Observation	9	9	9	9	9	9			
Minimum	21.30	37.20	19.20	22.30	17.20				
Maximum	28.20	41.60	22.80	25.80	20.50				
Average	23.63	39.54	21.13	23.84	18.61				
NAAQM Standards	60	100	80	80	400	-			
Test Method	40CFR Appendix L Part 53 CPCB Guidelines	IS:5182 (P-23)	IS:5182 (P-2)	IS:5182 (P-6)	Method of Air Sampling & Analysis	SOP No. NL/SOP/A AQ /VOC/ 01			



Test Report No.:

NL/2025/TFL/02/106

Post Vikrampur, Distt. Angul-759 106 Odisha, India

Test Report Date:

06/03/2025

Sample Particulars

Nature of the Sample

**Ambient Air Quality Monitoring** 

Purpose of Monitoring Method of Sampling

To Check the Pollution Load IS 5182 (Part 14)

Monitoring Conducted By

Mr. Manas Satapathy

Sampling Duration (Hrs.)

24 Hrs.

Sampling Location

AAQ-6,Kukudanga Village

Analysis Report

B	Analysis Report	
Date of Sampling	Concentration	on of Pollutants
	Methane HC μg/m³	Non Methane HC μg/m³
03/02/2025	ND	ND
06/02/2025	ND	ND
10/02/2025	ND	ND
13/02/2025	ND	ND
17/02/2025	ND	ND
20/02/2025	ND	ND
23/02/2025	ND	ND
24/02/2025	ND	ND
27/02/2025	ND	ND
No. of Observation	9	9
Minimum		-
Maximum	-	-
Average	-	•
NAAQM Standards	-	-
Test Method	IS:5182 (P-11)	IS:5182 (P-11)



Post Vikrampur, Distt. Angul-759 106

Odisha, India

ULR No.: Test Report Date: TC148142500001268F,1318F,1376F,1422F,1472F,1604F,1750F,1850F

05/04/2025

Sample Particulars

Nature of the Sample

Purpose of Monitoring

Method of Sampling Monitoring Conducted By

Sampling Duration (Hrs.)

Sampling Location

: Ambient Air Quality Monitoring

To Check the Pollution Load

IS 5182 (Part 14)

Mr. Manas Satapathy

24 Hrs.

: AAQ-1, TFL Admin Building

**Analysis Report** 

Date of Sampling			Concentration of Po	llutants		
	Particulate Matter (PM2.5) µg/m³	Particulate Matter (PM10) µg/m³	Sulphur Dioxide (as SO2) µg/m³	Nitrogen Dioxide (as NO2) μg/m³	Ammonia (as NH3) µg/m³	VOCs, μg/m³
03/03/2025	28.40	51.80	20.10	24.50	20.30	ND
06/03/2025	26.20	49.20	21.30	25.90	18.40	ND
08/03/2025	27.20	48.30	19.10	21.60	19.20	ND
10/03/2025	26.80	50.10	18.80	23.30	18.30	ND
13/03/2025	27.30	54.40	19.60	22.40	19.50	ND
17/03/2025	28.50	51.80	20.30	23.30	18.20	ND
20/03/2025	29.10	50.60	21.50	24.50	19.00	ND
24/03/2025	28.30	49.20	20.60	25.50	21.30	ND
27/03/2025	26.50	50.10	17.40	24.80	19.50	ND
No. of Observation	9	9	9	9	9	9
Minimum	26.20	48.30	17.40	21.60	18.20	
Maximum	29.10	54.40	21.50	25.90	21.30	-
Average	27.59	50.61	19.86	23.98	19.30	
NAAQM Standards	60	100	80	80	400	-
Test Method	40CFR Appendix L Part 53 CPCB Guidelines	IS:5182 (P-23)	IS:5182 (P-2)	IS:5182 (P-6)	Method of Air Sampling & Analysis	SOP No. NL/SOP/A AQ /VOC/



Post Vikrampur, Distt. Angul-759 106

Odisha, India

Test Report No.:

NL/2025/TFL/03/101

Test Report Date:

05/04/2025

Sample Particulars

Nature of the Sample

Purpose of Monitoring Method of Sampling

Monitoring Conducted By Sampling Duration (Hrs.)

Sampling Location

**Ambient Air Quality Monitoring** 

To Check the Pollution Load

IS 5182 (Part 14)

: Mr. Manas Satapathy

24 Hrs.

AAQ-1, TFL Admin Building

**Analysis Report** 

Date of Sampling	Concentration	on of Pollutants		
	Methane HC μg/m³	Non-Methane HC µg/m³		
03/03/2025	ND	ND		
06/03/2025	ND	ND		
08/03/2025	ND	ND		
10/03/2025 ND		ND		
13/03/2025 ND		ND		
17/03/2025	ND	ND		
20/03/2025	ND	ND		
24/03/2025	ND	ND		
27/03/2025	ND	ND		
No. of Observation	9	9		
Minimum	-			
Maximum	-	-		
Average	-	-		
NAAQM Standards	(*)	-		
Test Method	IS:5182 (P-11)	IS:5182 (P-11)		



Post Vikrampur, Distt. Angul-759 106

Odisha, India

ULR No .:

Test Report Date:

TC148142500001269F,1319F,1377F,1423F,1473F,1605F,1751F,1851F

05/04/2025

Sample Particulars

Nature of the Sample

Purpose of Monitoring

Method of Sampling Monitoring Conducted By

Sampling Duration (Hrs.)

Sampling Location

**Ambient Air Quality Monitoring** 

To Check the Pollution Load

IS 5182 (Part 14)

Mr. Manas Satapathy

24 Hrs.

AAQ-2, H.B.Colony

Analysis Report

Date of Sampling			Concentration of Po	llutants		
	Particulate Matter (PM2.5) µg/m³	Particulate Matter (PM10) µg/m³	Sulphur Dioxide (as SO2) µg/m³	Nitrogen Dioxide (as NO2) µg/m³	Ammonia (as NH3) μg/m³	VOCs, μg/m³
03/03/2025	24.20	43.20	20.60	24.80	20.30	ND
06/03/2025	25.50	41.50	18.20	23.30	21.60	ND
08/03/2025	21.50	40.80	17.50	22.50	23.20	ND
10/03/2025	26.30	44.80	19.20	23.80	21.60	ND
13/03/2025	23.60	39.80	15.20	24.10	19.20	ND
17/03/2025	24.50	43.80	16.40	23.30	20.00	ND
20/03/2025	25.80	42.80	18.20	22.10	20.50	ND
24/03/2025	24.80	41.90	17.50	20.60	20.30	ND
27/03/2025	26.10	44.20	18.10	21.90	21.40	ND
No. of Observation	9	9	9	9	9	9
Minimum	21.50	39.80	15.20	20.60	19.20	-
Maximum	26.30	44.80	20.60	24.80	23.20	
Average	24.70	42.53	17.88	22.93	20.90	
NAAQM Standards	60	100	80	80	400	-
Test Method	40CFR Appendix L Part 53 CPCB Guidelines	IS:5182 (P-23)	IS:5182 (P-2)	IS:5182 (P-6)	Method of Air Sampling & Analysis	SOP No. NL/SOP/A AQ /VOC/



Post Vikrampur, Distt. Angul-759 106

Odisha, India

Test Report No.:

NL/2025/TFL/03/102

Test Report Date: 05/04/2025

Sample Particulars

Nature of the Sample

Purpose of Monitoring Method of Sampling

Monitoring Conducted By Sampling Duration (Hrs.)

Sampling Location

: Ambient Air Quality Monitoring

To Check the Pollution Load

IS 5182 (Part 14)

Mr. Manas Satapathy

: 24 Hrs.

: AAQ-2, H.B.Colony

**Analysis Report** 

Date of Sampling	Concentration	on of Pollutants
	Methane HC μg/m³	Non Methane HC µg/m³
03/03/2025	ND	ND
06/03/2025 ND		ND
08/03/2025 ND		ND
10/03/2025 ND		ND.
13/03/2025	ND	ND
17/03/2025	ND	ND
20/03/2025	ND	ND
24/03/2025	ND	ND
27/03/2025	ND	ND
No. of Observation	9	9
Minimum	-	-
Maximum		-
Average	4 <del>=</del> :	-
NAAQM Standards		-
Test Method	IS:5182 (P-11)	IS:5182 (P-11)



Post Vikrampur, Distt. Angul-759 106

Odisha, India

ULR No.:

Test Report Date:

TC148142500001270F,1320F,1378F,1424F,1474F,1606F,1752F,1852F

05/04/2025

Sample Particulars

Nature of the Sample

Purpose of Monitoring Method of Sampling

Monitoring Conducted By

Sampling Duration (Hrs.) Sampling Location : Ambient Air Quality Monitoring

To Check the Pollution Load

IS 5182 (Part 14)

Mr. Manas Satapathy

24 Hrs.

: AAQ-3, TFL Guest House

Analysis Report

Date of Sampling			Concentration of Po	llutants		
	Particulate Matter (PM2.5) µg/m³	Particulate Matter (PM10) µg/m³	Sulphur Dioxide (as SO2) µg/m³	Nitrogen Dioxide (as NO2) μg/m³	Ammonia (as NH3) μg/m³	VOCs, μg/m³
03/03/2025	26.80	47.50	16.20	19.50	20.60	ND
06/03/2025	25.50	46.20	17.50	21.80	21.40	ND
08/03/2025	25.80	43.10	15.80	20.10	22.30	ND
10/03/2025	27.20	44.50	17.20	21.00	23.40	ND
13/03/2025	24.40	46.70	16.20	21.10	22.80	ND
17/03/2025	25.80	38.20	17.50	23.80	25.50	ND
20/03/2025	24.10	44.20	18.80	22.40	22.60	ND
24/03/2025	26.30	43.20	15.50	20.80	21.60	ND
27/03/2025	24.10	46.20	18.10	21.80	22.00	ND
No. of Observation	9	9	9	9	9	9
Minimum	24.10	38.20	15.50	19.50	20.60	
Maximum	27.20	47.50	18.80	23.80	25.50	_
Average	25.56	44.42	16.98	21.37	22.47	
NAAQM Standards	60	100	80	80	400	
Test Method	40CFR Appendix L Part 53 CPCB Guidelines	IS:5182 (P-23)	IS:5182 (P-2)	IS:5182 (P-6)	Method of Air Sampling & Analysis	SOP No. NL/SOP/A AQ /VOC/ 01



Post Vikrampur, Distt. Angul-759 106

Odisha, India

Test Report No.:

NL/2025/TFL/03/103

Test Report Date: 05/0

05/04/2025

Sample Particulars

Nature of the Sample

Purpose of Monitoring Method of Sampling

Sampling Duration (Hrs.)

Monitoring Conducted By

Sampling Location

: Ambient Air Quality Monitoring

To Check the Pollution Load

IS 5182 (Part 14)

Mr. Manas Satapathy

: 24 Hrs.

AAQ-3, TFL Guest House

**Analysis Report** 

Date of Sampling	Concentration	on of Pollutants	
	Methane HC μg/m³	Non Methane HC µg/m³	
03/03/2025	ND	ND	
06/03/2025 ND		ND	
08/03/2025 ND		ND	
10/03/2025 ND		ND	
13/03/2025	ND	ND	
17/03/2025	ND	ND	
20/03/2025	ND	ND	
24/03/2025	ND	ND	
27/03/2025	ND	ND	
No. of Observation	9	9	
Minimum	-	-	
Maximum	3 <b>4</b> 8	-	
Average	-	-	
NAAQM Standards	-	•	
Test Method	IS:5182 (P-11)	IS:5182 (P-11)	

Remark



Post Vikrampur, Distt. Angul-759 106

Odisha, India

ULR No .:

Test Report Date:

TC148142500001271F,1321F,1379F,1425F,1477F,1607F,1753F,1853F

05/04/2025

Sample Particulars

Nature of the Sample

Purpose of Monitoring

Method of Sampling Monitoring Conducted By

Sampling Duration (Hrs.)

Sampling Location

: Ambient Air Quality Monitoring

To Check the Pollution Load

IS 5182 (Part 14)

Mr. Manas Satapathy

: 24 Hrs.

: AAQ-4,Balanda House

**Analysis Report** 

Date of Sampling			Concentration of Po	llutants		
	Particulate Matter (PM2.5) µg/m³	Particulate Matter (PM10) µg/m³	Sulphur Dioxide (as SO2) µg/m³	Nitrogen Dioxide (as NO2) μg/m <sup>3</sup>	Ammonia (as NH3) µg/m³	VOCs, μg/m³
03/03/2025	23.30	47.50	19.20	22.40	20.20	ND
06/03/2025	24.40	42.50	18.20	24.60	18.40	ND
08/03/2025	21.50	41.10	21.50	25.10	19.20	ND
10/03/2025	24.50	43.30	19.40	26.60	20.50	ND
13/03/2025	23.30	44.80	20.60	24.00	21.50	ND
17/03/2025	25.50	48.10	21.80	25.90	18.50	ND
20/03/2025	22.60	45.80	17.30	25.50	17.90	ND
24/03/2025	21.90	47.50	20.30	24.20	18.10	ND
27/03/2025	23.20	46.00	21.00	26.10	19.20	ND
No. of Observation	9	9	9	9	9	9
Minimum	21.50	41.10	17.30	22.40	17.90	
Maximum	25.50	48.10	21.80	26.60	21.50	_
Average	23.36	45.18	19.92	24.93	19.28	_
NAAQM Standards	60	100	80	80	400	-
Test Method	40CFR Appendix L Part 53 CPCB Guidelines	IS:5182 (P-23)	IS:5182 (P-2)	IS:5182 (P-6)	Method of Air Sampling & Analysis	SOP No. NL/SOP/A AQ /VOC



Post Vikrampur, Distt. Angul-759 106

Odisha, India

Test Report No.:

NL/2025/TFL/03/104

Test Report Date: 05/04/2025

Sample Particulars

Nature of the Sample **Ambient Air Quality Monitoring** Purpose of Monitoring To Check the Pollution Load

Method of Sampling IS 5182 (Part 14) Monitoring Conducted By Mr. Manas Satapathy Sampling Duration (Hrs.)

24 Hrs. Sampling Location : AAQ-4,Balanda House

	Analysis Report	
Date of Sampling	Concentration	on of Pollutants
	Methane HC μg/m³	Non Methane HC μg/m³
03/03/2025	ND	ND
06/03/2025	ND	ND
08/03/2025	ND	ND
10/03/2025	ND	ND
13/03/2025	ND	ND
17/03/2025	ND	ND
20/03/2025	ND	ND
24/03/2025	ND	ND
27/03/2025	ND	ND
No. of Observation	9	9
Minimum	-	-
Maximum	-	-
Average	-	-
NAAQM Standards	-	-
Test Method	IS:5182 (P-11)	IS:5182 (P-11)



Post Vikrampur, Distt. Angul-759 106

Odisha, India

ULR No .: Test Report Date: TC148142500001272F,1322F,1380F,1426F,1478F,1608F,1754F,1854F

05/04/2025

Sample Particulars

Nature of the Sample

Purpose of Monitoring

Method of Sampling Monitoring Conducted By

Sampling Duration (Hrs.)

Sampling Location

**Ambient Air Quality Monitoring** 

To Check the Pollution Load

: IS 5182 (Part 14)

: Mr. Manas Satapathy

: 24 Hrs.

AAQ-5,Karnapur Village

**Analysis Report** 

Date of Sampling			Concentration of Po	llutants		
	Particulate Matter (PM2.5) µg/m³	Particulate Matter (PM10) μg/m³	Sulphur Dioxide (as SO2) µg/m³	Nitrogen Dioxide (as NO2) µg/m³	Ammonia (as NH3) µg/m³	VOCs, μg/m³
03/03/2025	29.10	48.20	21.40	26.50	20.30	ND
06/03/2025	30.40	50.20	20.60	27.70	19.20	ND
08/03/2025	32.40	49.30	19.20	25.50	18.50	ND
10/03/2025	33.50	47.30	20.50	28.60	17.20	ND
13/03/2025	31.10	46.10	21.80	27.20	21.50	ND
17/03/2025	30.90	52.20	22.60	26.40	25.50	ND
20/03/2025	28.60	48.10	22.40	25.40	21.00	ND
24/03/2025	29.70	44.30	21.50	27.00	19.30	ND
27/03/2025	26.40	47.70	20.10	24.40	20.60	ND
No. of Observation	9	9	9	9	9	9
Minimum	26.40	44.30	19.20	24.40	17.20	_
Maximum	33.50	52.20	22.60	28.60	25.50	
Average	30.23	48.16	21.12	26.52	20.34	
NAAQM Standards	60	100	80	80	400	-
Test Method	40CFR Appendix L Part 53 CPCB Guidelines	IS:5182 (P-23)	IS:5182 (P-2)	IS:5182 (P-6)	Method of Air Sampling & Analysis	SOP No. NL/SOP/A AQ /VOC



Post Vikrampur, Distt. Angul-759 106

Odisha, India

Test Report No.:

NL/2025/TFL/03/105

Test Report Date:

05/04/2025

Sample Particulars

Nature of the Sample

Purpose of Monitoring

Method of Sampling Monitoring Conducted By

Sampling Duration (Hrs.)

Sampling Location

**Ambient Air Quality Monitoring** 

To Check the Pollution Load

IS 5182 (Part 14)

Mr. Manas Satapathy

24 Hrs.

AAQ-5,Karnapur Village

**Analysis Report** 

Date of Sampling	Analysis Report  Concentration	on of Pollutants		
	Methane HC µg/m³	Non Methane HC µg/m³		
03/03/2025	ND	ND		
06/03/2025 ND		ND		
08/03/2025 ND		ND		
10/03/2025 ND		ND		
13/03/2025 ND		ND		
17/03/2025	ND	ND		
20/03/2025	ND	ND		
24/03/2025	ND	ND		
27/03/2025	ND	ND		
No. of Observation	9	9		
Minimum		-		
Maximum	S. M.	-		
Average		-		
NAAQM Standards	SIM.	-		
Test Method IS:5182 (P-11)		IS:5182 (P-11)		



Post Vikrampur, Distt. Angul-759 106

Odisha, India

ULR No .:

Test Report Date:

TC148142500001273F,1323F,1381F,1427F,1479F,1609F,1755F,1855F

05/04/2025

Sample Particulars

Nature of the Sample : Ambient Air Quality Monitoring

Purpose of Monitoring : To Check the Pollution Load

Method of Sampling : IS 5182 (Part 14)

Monitoring Conducted By : Mr. Manas Satapathy

Sampling Duration (Hrs.) : 24 Hrs.

Sampling Location : AAQ-6,Kukudanga Village

Date of Sampling			Concentration of Po	llutants		
	Particulate Matter (PM2.5) µg/m³	Particulate Matter (PM10) µg/m³	Sulphur Dioxide (as SO2) μg/m³	Nitrogen Dioxide (as NO2) µg/m³	Ammonia (as NH3) µg/m³	VOCs, µg/m³
03/03/2025	28.40	40.60	22.00	26.40	20.30	ND
06/03/2025	31.40	41.90	21.40	25.80	19.20	ND
08/03/2025	24.60	38.60	24.90	28.10	20.40	ND
10/03/2025	26.80	41.20	23.60	27.70	21.50	ND
13/03/2025	24.80	42.50	24.50	29.40	21.30	ND
17/03/2025	25.10	43.90	21.60	27.00	22.40	ND
20/03/2025	26.30	40.20	24.00	26.90	19.60	ND
24/03/2025	24.20	44.20	21.80	26.10	20.00	ND
27/03/2025	27.90	40.90	23.50	28.80	21.00	ND
No. of Observation	9	9	9	9	9	9
Minimum	24.20	38.60	21.40	25.80	19.20	_
Maximum	31.40	44.20	24.90	29.40	22.40	_
Average	26.61	41.56	23.03	27.36	20.63	-
NAAQM Standards	60	100	80	80	400	-
Test Method	40CFR Appendix L Part 53 CPCB Guidelines	IS:5182 (P-23)	IS:5182 (P-2)	IS:5182 (P-6)	Method of Air Sampling & Analysis	SOP No. NL/SOP/A AQ /VOC/ 01



Post Vikrampur, Distt. Angul-759 106

Odisha, India

Test Report No.:

NL/2025/TFL/03/106

Test Report Date: 05/04/2025

Sample Particulars

Nature of the Sample

Purpose of Monitoring Method of Sampling Monitoring Conducted By

Sampling Duration (Hrs.)

Sampling Location

**Ambient Air Quality Monitoring** 

To Check the Pollution Load

IS 5182 (Part 14) Mr. Manas Satapathy

24 Hrs.

AAQ-6,Kukudanga Village

**Analysis Report** 

Date of Sampling	Concentration	on of Pollutants		
	Methane HC μg/m³	Non Methane HC µg/m³		
03/03/2025	ND	ND		
06/03/2025	ND	ND		
08/03/2025	ND	ND		
10/03/2025 ND		ND		
13/03/2025	ND	ND		
17/03/2025	ND	ND		
20/03/2025	ND	ND		
24/03/2025	ND	ND		
27/03/2025	ND	ND		
No. of Observation	9	9		
Minimum	¥			
Maximum	4	-		
Average	-	-		
NAAQM Standards	-	-		
Test Method IS:5182 (P-11)		IS:5182 (P-11)		



ULR No .:

TC148142500002110F,2173F,2225F,2271F,2357F,2426F,2489F,2528F

, 2644F

Post Vikrampur, Distt. Angul-759 106

Odisha, India

Test Report Date: 08/05/2025

Sample Particulars

Nature of the Sample

**Ambient Air Quality Monitoring** To Check the Pollution Load

Purpose of Monitoring

Method of Sampling Monitoring Conducted By IS 5182 (Part 14) Mr. Manas Satapathy

Sampling Duration (Hrs.)

24 Hrs.

Sampling Location

AAQ-1, TFL Admin Building

**Analysis Report** 

Date of Sampling		Concentration of Pollutants							
	Particulate Matter (PM2.5) µg/m³	Particulate Matter (PM10) µg/m³	Sulphur Dioxide (as SO2) µg/m³	Nitrogen Dioxide (as NO2) μg/m³	Ammonia (as NH3) µg/m³	VOCs, µg/m³			
01/04/2025	25.60	48.20	17.40	21.30	17.20	ND			
03/04/2025	24.30	46.00	18.20	22.50	16.50	ND			
07/04/2025	25.00	45.70	16.60	19.20	17.40	ND			
10/04/2025	23.80	47.10	15.80	22.10	16.20	ND			
14/04/2025	24.90	51.20	16.20	20.50	17.40	ND			
17/04/2025	25.20	48.20	18.00	21.40	16.00	ND			
21/04/2025	26.00	47.90	19.50	23.00	17.50	ND			
24/04/2025	25.10	46.00	18.60	22.60	19.20	ND			
28/04/2025	24.00	48.00	15.00	21.30	17.50	ND			
No. of Observation	9	9	9	9	9	9			
Minimum	23.80	45.70	15.00	19.20	16.00	_			
Maximum	26.00	51.20	19.50	23.00	19.20	_			
Average	24.88	47.59	17.26	21.54	17.21	_			
NAAQM Standards	60	100	80	80	400	-			
Test Method	40CFR Appendix L Part 53 CPCB Guidelines	IS:5182 (P-23)	IS:5182 (P-2)	IS:5182 (P-6)	Method of Air Sampling & Analysis	SOP No. NL/SOP/A AQ /VOC/ 01			



Post Vikrampur, Distt. Angul-759 106

Odisha, India

Test Report No.:

NL/2025/TFL/03/101

Test Report Date: 05/04/2025

**Ambient Air Quality Monitoring** 

Sample Particulars

Nature of the Sample

Purpose of Monitoring : To Check the Pollution Load

Method of Sampling : IS 5182 (Part 14)

Monitoring Conducted By : Mr. Manas Satapathy

Sampling Duration (Hrs.) : 24 Hrs.

Sampling Location : AAQ-1, TFL Admin Building

Analysis Report

Date of Sampling	Analysis Report Concentration	on of Pollutants
	Methane HC μg/m³	Non-Methane HC µg/m³
01/04/2025	ND	ND
03/04/2025	ND	ND
07/04/2025	ND	ND
10/04/2025	ND	ND
14/04/2025	ND	ND
17/04/2025	ND	ND
21/04/2025	ND	ND
24/04/2025	ND	ND
28/04/2025	ND	ND
No. of Observation	9	9
Minimum	-	-
Maximum	-	-
Average	-	-
NAAQM Standards	*	
Test Method	IS:5182 (P-11)	IS:5182 (P-11)



ULR No .:

TC148142500002111F,2174F,2226F,2272F,2358F,2427F,2490F,2529F

, 2645F

Post Vikrampur, Distt. Angul-759 106

Odisha, India

Test Report Date:

08/05/2025

Sample Particulars

Nature of the Sample

Purpose of Monitoring

Method of Sampling Monitoring Conducted By

Sampling Duration (Hrs.)

Sampling Location

**Ambient Air Quality Monitoring** 

To Check the Pollution Load

IS 5182 (Part 14)

Mr. Manas Satapathy

24 Hrs.

AAQ-2, H.B.Colony

Analysis Report

Date of Sampling	I	Analysis R	Concentration of Po	Hutante				
Date of Damping								
	Particulate Matter (PM2.5) µg/m³	Particulate Matter (PM10) μg/m <sup>3</sup>	Sulphur Dioxide (as SO2) µg/m³	Nitrogen Dioxide (as NO2) μg/m³	Ammonia (as NH3) µg/m³	VOCs, µg/m³		
01/04/2025	21.50	40.50	18.40	22.50	18.20	ND		
03/04/2025	23.40	43.20	17.20	21.20	19.30	ND		
07/04/2025	19.60	42.20	15.60	20.50	21.20	ND		
10/04/2025	24.20	41.60	16.30	21.40	19.30	ND		
14/04/2025	21.60	40.90	14.50	20.90	18.20	ND		
17/04/2025	22.30	41.20	15.20	21.60	17.50	ND		
21/04/2025	23.90	40.30	16.40	20.30	18.50	ND		
24/04/2025	22.90	43.20	15.30	19.50	19.30	ND		
28/04/2025	24.00	42.20	16.80	22.10	20.20	ND		
No. of Observation	9	9	9	9	9	9		
Minimum	19.60	40.30	14.50	19.50	17.50	-		
Maximum	24.20	43.20	18.40	22.50	21.20	-		
Average	22.60	41.70	16.19	21.11	19.08			
NAAQM Standards	60	100	80	80	400	-		
Test Method	40CFR Appendix L Part 53 CPCB Guidelines	IS:5182 (P-23)	IS:5182 (P-2)	IS:5182 (P-6)	Method of Air Sampling & Analysis	SOP No NL/SOP/ AQ /VOC 01		



Post Vikrampur, Distt. Angul-759 106

Odisha, India

Test Report No.:

NL/2025/TFL/03/102

Test Report Date: 05/04/2025

Sample Particulars

Nature of the Sample

Purpose of Monitoring Method of Sampling Monitoring Conducted By

Sampling Duration (Hrs.)

Sampling Location

**Ambient Air Quality Monitoring** 

To Check the Pollution Load

: IS 5182 (Part 14) : Mr. Manas Satapathy

: 24 Hrs.

: AAQ-2, H.B.Colony

**Analysis Report** 

Date of Sampling	Concentration	on of Pollutants
	Methane HC μg/m³	Non Methane HC μg/m³
01/04/2025	ND	ND
03/04/2025	ND	ND
07/04/2025	ND	ND
10/04/2025	ND	ND
14/04/2025	ND	ND
17/04/2025	ND	ND
21/04/2025	ND	ND
24/04/2025	ND	ND
28/04/2025	ND	ND
No. of Observation	9	9
Minimum	2	
Maximum	-	-
Average	-	-
NAAQM Standards		•
Test Method IS:5182 (P-11)		IS:5182 (P-11)



ULR No .:

TC148142500002112F,2175F,2227F,2273F,2359F,2428F,2491F,2530F

, 2646F

Post Vikrampur, Distt. Angul-759 106

Odisha, India

Test Report Date:

08/05/2025

Sample Particulars

Nature of the Sample

: A

Ambient Air Quality Monitoring
To Check the Pollution Load

Purpose of Monitoring

: IS 5182 (Part 14)

Method of Sampling

: Mr. Manas Satapathy

Monitoring Conducted By Sampling Duration (Hrs.)

: 24 Hrs.

Sampling Location

: AAQ-3, TFL Guest House

**Analysis Report** 

Date of Sampling			Concentration of Po	llutants		
	Particulate Matter (PM2.5) µg/m³	Particulate Matter (PM10) µg/m³	Sulphur Dioxide (as SO2) µg/m³	Nitrogen Dioxide (as NO2) μg/m³	Ammonia (as NH3) µg/m³	VOCs, μg/m³
01/04/2025	24.20	45.50	18.40	22.50	18.30	ND
03/04/2025	23.20	44.20	19.50	23.60	19.50	ND
07/04/2025	24.30	42.30	17.30	21.50	20.10	ND
10/04/2025	25.10	42.50	16.40	20.90	21.60	ND
14/04/2025	22.90	43.60	14.50	19.20	20.60	ND
17/04/2025	23.30	40.50	15.20	21.00	23.10	ND
21/04/2025	22.60	42.20	16.30	19.80	20.80	ND
24/04/2025	24.00	41.50	14.20	18.30	19.20	ND
28/04/2025	21.60	43.20	16.50	23.40	20.50	ND
No. of Observation	9	9	9	9	9	9
Minimum	21.60	40.50	14.20	18.30	18.30	
Maximum	25.10	45.50	19.50	23.60	23.10	
Average	23.47	42.83	16.48	21.13	20.41	-
NAAQM Standards	60	100	80	80	400	-
Test Method	40CFR Appendix L Part 53 CPCB Guidelines	IS:5182 (P-23)	IS:5182 (P-2)	IS:5182 (P-6)	Method of Air Sampling & Analysis	SOP No. NL/SOP// AQ /VOC 01



Post Vikrampur, Distt. Angul-759 106

Odisha, India

Test Report No .:

NL/2025/TFL/03/103

Test Report Date: 05/04/2025

Sample Particulars

Nature of the Sample

Purpose of Monitoring

Method of Sampling

Sampling Duration (Hrs.)

Monitoring Conducted By

Sampling Location

**Ambient Air Quality Monitoring** 

To Check the Pollution Load

: IS 5182 (Part 14)

: Mr. Manas Satapathy

24 Hrs.

AAQ-3, TFL Guest House

**Analysis Report** 

Date of Sampling	Concentration	on of Poliutants
	Methane HC µg/m³	Non Methane HC µg/m³
01/04/2025	ND	ND
03/04/2025 ND		ND
07/04/2025 ND		ND
10/04/2025 ND		ND
14/04/2025	ND	ND
17/04/2025	ND	ND
21/04/2025	ND	ND
24/04/2025	ND	ND
28/04/2025	ND	ND
No. of Observation	9	9
Minimum	¥	-
Maximum		-
Average	-	-
NAAQM Standards	(*)	
Test Method IS:5182 (P-11)		IS:5182 (P-11)



ULR No .:

TC148142500002113F,2176F,2228F,2274F,2360F,2429F,2492F,2531F

, 2647F

Post Vikrampur, Distt. Angul-759 106

Odisha, India

Test Report Date:

08/05/2025

Sample Particulars

Nature of the Sample

: Ambient Air Quality Monitoring

Purpose of Monitoring

To Check the Pollution Load

Method of Sampling

IS 5182 (Part 14)

Monitoring Conducted By Sampling Duration (Hrs.) : Mr. Manas Satapathy

24 Hrs.

Sampling Location

: AAQ-4,Balanda House

**Analysis Report** 

Date of Sampling			Concentration of Po	llutants		
	Particulate Matter (PM2.5) µg/m³	Particulate Matter (PM10) µg/m³	Sulphur Dioxide (as SO2) µg/m³	Nitrogen Dioxide (as NO2) μg/m <sup>3</sup>	Ammonia (as NH3) µg/m³	VOCs, μg/m³
01/04/2025	21.30	45.50	17.40	20.50	18.30	ND
03/04/2025	22.50	44.10	16.80	22.10	16.50	ND
07/04/2025	19.20	43.30	19.20	23.40	17.20	ND
10/04/2025	22.30	45.50	18.00	24.40	18.50	ND
14/04/2025	21.40	46.20	19.30	23.10	19.20	ND
17/04/2025	23.30	45.00	20.30	24.00	16.00	ND
21/04/2025	24.40	43.60	19.10	26.60	19.00	ND
24/04/2025	23.80	45.50	18.30	22.30	16.10	ND
28/04/2025	25.60	44.60	17.40	22.10	17.20	ND
No. of Observation	9	9	9	9	9	9
Minimum	19.20	43.30	16.80	20.50	16.00	_
Maximum	25.60	46.20	20.30	26.60	19.20	-
Average	22.64	44.81	18.42	23.17	17.56	-
NAAQM Standards	60	100	80	80	400	-
Test Method	40CFR Appendix L Part 53 CPCB Guidelines	IS:5182 (P-23)	IS:5182 (P-2)	IS:5182 (P-6)	Method of Air Sampling & Analysis	SOP No. NL/SOP/A AQ /VOC

Remark:



Post Vikrampur, Distt. Angul-759 106

Odisha, India

Test Report No.:

NL/2025/TFL/03/104

Test Report Date: 05/04/2025

Sample Particulars

Nature of the Sample

Purpose of Monitoring Method of Sampling

Monitoring Conducted By Sampling Duration (Hrs.)

Sampling Location

**Ambient Air Quality Monitoring** 

To Check the Pollution Load

IS 5182 (Part 14)

Mr. Manas Satapathy

24 Hrs.

AAQ-4,Balanda House

**Analysis Report** 

Date of Sampling	Concentration	on of Pollutants		
	Methane HC μg/m³	Non Methane HC μg/m³		
01/04/2025	ND	ND		
03/04/2025 ND		ND		
07/04/2025	ND	ND		
10/04/2025	ND .	ND		
14/04/2025 ND		ND		
17/04/2025	ND	ND		
21/04/2025	ND	ND		
24/04/2025	ND	ND		
28/04/2025	ND	ND		
No. of Observation	9	9		
Minimum	•	•		
Maximum	-			
Average		-		
NAAQM Standards	949	•		
Test Method	IS:5182 (P-11)	IS:5182 (P-11)		



ULR No .:

TC148142500002114F,2177F,2229F,2275F,2361F,2430F,2493F,2532F

, 2648F

Post Vikrampur, Distt. Angul-759 106

Odisha, India

Test Report Date:

08/05/2025

Sample Particulars

Nature of the Sample

: Ambient Air Quality Monitoring

Purpose of Monitoring

To Check the Pollution Load

Method of Sampling

IS 5182 (Part 14)

Monitoring Conducted By

Mr. Manas Satapathy

Sampling Duration (Hrs.)

: 24 Hrs.

Sampling Location

: AAQ-5,Karnapur Village

**Analysis Report** 

Date of Sampling			Concentration of Po	llutants		
	Particulate Matter (PM2.5) µg/m³	Particulate Matter (PM10) μg/m³	Sulphur Dioxide (as SO2) µg/m³	Nitrogen Dioxide (as NO2) µg/m³	Ammonia (as NH3) µg/m³	VOCs, μg/m³
01/04/2025	27.20	46.20	23.10	28.40	22.40	ND
03/04/2025	28.50	48.30	22.40	29.40	21.50	ND
07/04/2025	30.40	47.60	21.50	27.50	20.50	ND
10/04/2025	31.20	45.20	22.30	26.60	19.40	ND
14/04/2025	29.40	44.50	23.60	29.20	23.50	ND
17/04/2025	28.30	50.80	24.50	24.80	27.50	ND
21/04/2025	26.60	46.20	24.00	27.70	23.10	ND
24/04/2025	27.70	42.20	23.60	28.10	21.30	ND
28/04/2025	28.40	45.60	22.10	26.30	22.70	ND
No. of Observation	9	9	9	9	9	9
Minimum	26.60	42.20	21.50	24.80	19.40	-
Maximum	31.20	50.80	24.50	29.40	27.50	
Average	28.63	46.29	23.01	27.56	22.43	
NAAQM Standards	60	100	80	80	400	-
Test Method	40CFR Appendix L Part 53 CPCB Guidelines	IS:5182 (P-23)	IS:5182 (P-2)	IS:5182 (P-6)	Method of Air Sampling & Analysis	SOP No. NL/SOP/A AQ /VOC



Post Vikrampur, Distt. Angul-759 106

Odisha, India

Test Report No.:

NL/2025/TFL/03/105

Test Report Date: 05/04/2025

Sample Particulars

Nature of the Sample

Purpose of Monitoring Method of Sampling

Monitoring Conducted By Sampling Duration (Hrs.)

Sampling Location

: Ambient Air Quality Monitoring

To Check the Pollution Load

: IS 5182 (Part 14)

: Mr. Manas Satapathy

: 24 Hrs.

: AAQ-5,Kamapur Village

Analysis Report

Date of Sampling	Concentration	on of Pollutants		
	Methane HC μg/m³	Non Methane HC µg/m³		
01/04/2025	ND	ND		
03/04/2025 ND		ND		
07/04/2025 ND		ND		
10/04/2025 ND		ND		
14/04/2025 ND		ND		
17/04/2025	ND	ND		
21/04/2025	ND	ND		
24/04/2025	ND	ND		
28/04/2025	ND	ND		
No. of Observation	9	9		
Minimum		-		
Maximum	( <u>-</u>	-		
Average	02	-		
NAAQM Standards	7 <u>4</u> ,			
Test Method (P-11)		IS:5182 (P-11)		



ULR No .:

TC148142500002115F,2178F,2230F,2276F,2362F,2431F,2494F,2533F

2649F

Post Vikrampur, Distt. Angul-759 106

Odisha, India

Test Report Date:

08/05/2025

Sample Particulars

Nature of the Sample

Ambient Air Quality Monitoring

Purpose of Monitoring

To Check the Pollution Load

Method of Sampling

IS 5182 (Part 14)

Monitoring Conducted By

: Mr. Manas Satapathy

Sampling Duration (Hrs.)

: 24 Hrs.

Sampling Location

AAQ-6,Kukudanga Village

**Analysis Report** 

Date of Sampling		Concentration of Pollutants							
	Particulate Matter (PM2.5) μg/m³	Particulate Matter (PM10) µg/m³	Sulphur Dioxide (as SO2) µg/m³	Nitrogen Dioxide (as NO2) μg/m³	Ammonia (as NH3) µg/m³	VOCs, µg/m³			
01/04/2025	25.20	42.30	20.30	24.40	18.20	ND			
03/04/2025	27.50	43.20	19.50	23.90	17.40	ND			
07/04/2025	22.30	40.60	22.60	26.20	18.50	ND			
10/04/2025	24.60	43.30	21.70	25.70	19.20	ND			
14/04/2025	22.30	44.50	22.50	27.00	18.00	ND			
17/04/2025	23.30	41.60	19.90	25.10	21.10	ND			
21/04/2025	24.50	42.20	22.00	25.90	17.00	ND			
24/04/2025	23.20	46.20	19.30	24.10	22.00	ND			
28/04/2025	25.60	42.80	21.50	26.80	23.10	ND			
No. of Observation	9	9	9	9	9	9			
Minimum	22.30	40.60	19.30	23.90	17.00				
Maximum	27.50	46.20	22.60	27.00	23.10	-			
Average	24.28	42.97	21.03	25.46	19.39				
NAAQM Standards	60	100	80	80	400				
Test Method	40CFR Appendix L Part 53 CPCB Guidelines	IS:5182 (P-23)	IS:5182 (P-2)	IS:5182 (P-6)	Method of Air Sampling & Analysis	SOP No. NL/SOP/A AQ /VOC/ 01			

Remark:



Post Vikrampur, Distt. Angul-759 106

Odisha, India

Test Report No.:

NL/2025/TFL/03/106

Test Report Date: 05/0

05/04/2025

Sample Particulars

Nature of the Sample Purpose of Monitoring

Method of Sampling Monitoring Conducted By

Sampling Duration (Hrs.)

Sampling Location

: Ambient Air Quality Monitoring

To Check the Pollution Load

IS 5182 (Part 14)

Mr. Manas Satapathy

: 24 Hrs.

AAQ-6,Kukudanga Village

Analysis Report

Date of Sampling	Analysis Report  Concentration	on of Pollutants
	Methane HC µg/m³	Non Methane HC μg/m³
01/04/2025	ND	ND
03/04/2025	ND	ND
07/04/2025	ND	ND
10/04/2025	ND	ND
14/04/2025	ND	ND
17/04/2025	ND	ND
21/04/2025	ND	ND
24/04/2025	ND	ND
28/04/2025	ND	ND
No. of Observation	9	9
Minimum		
Maximum	-	-
Average	-	
NAAQM Standards	-	-
Test Method IS:5182 (P-11)		IS:5182 (P-11)



## Test Reports of Noise Monitoring (November 2024 to April 2025)



Post Vikrampur, Distt. Angul-759 106

Odisha, India

ULR No.:

TC148142400000106F,137F,239F, 267F,323F,403F,461F,544F

Test Report Date: 09/12/2024

Sample Particulars

Nature of the Sample Purpose of Monitoring Method of Sampling

Instrument Used

Sampling Location

: Ambient Noise

To Check the Pollution Loads

IS:9989

Sound Level Meter N-1, TFL Admin Building

**Analysis Report** 

Sr. No.	Date of Sampling	Test Result dB(A) Day Time	Test Result dB(A) Night Time	Test Method
1	04/11/2024	50.5	35.5	159989
2	07/11/2024	52.5	37.2	IS 9989
3	11/11/2024	55.5	40.2	IS 9989
4	14/11/2024	50.5	40.6	IS 9989
5	18/11/2024	50.5	45.5	IS 9989
6	21/11/2024	51.5	42.8	IS 9989
7	25/11/2024	55.5	40.2	IS 9989
8	28/11/2024	49.5	42.5	IS 9989

Area Code	Category of Area	Limits	dB (A) Leq
		Day Time (6AM - 10PM)	Night Time (10PM - 06AM)
A	Industrial Area	75	70
В	Commercial Area	65	55
C	Residential Area	55	45
D	Silence Zone	50	40



Post Vikrampur, Distt. Angul-759 106

Odisha, India

ULR No.: Test Report Date: TC148142400000107F,138F,240F, 268F,324F,404F,462F,545F

09/12/2024

Sample Particulars

Nature of the Sample Purpose of Monitoring

Method of Sampling Instrument Used Sampling Location

**Ambient Noise** 

To Check the Pollution Loads

IS:9989

Sound Level Meter

N-2, H.B.Colony

**Analysis Report** 

Sr. No.	Date of Sampling	Test Result dB(A) Day Time	Test Result dB(A) Night Time	TestMethod
1	04/11/2024	56.5	45.5	IS9989
2	07/11/2024	54.5	43.2	IS 9989
3	11/11/2024	52.5	45.5	IS 9989
4	14/11/2024	48.5	41.5	IS 9989
5	18/11/2024	48.6	40.2	IS 9989
6	21/11/2024	50.2	40.5	IS 9989
7	25/11/2024	51.5	38.5	IS 9989
8	28/11/2024	50.5	40.2	IS 9989

Area Code	Category of Area	Limits	dB (A) Leq
		Day Time (6AM - 10PM)	Night Time (10PM - 06AM)
A	Industrial Area	75	70
В	Commercial Area	65	55
С	Residential Area	55	45
D	Silence Zone	50	40



Post Vikrampur, Distt. Angul-759 106

Odisha, India

ULR No.:

TC148142400000108F,139F,241F, 269F,325F,405F,463F,546F

Test Report Date: 09/12/2024

Sample Particulars

Nature of the Sample Purpose of Monitoring Method of Sampling Instrument Used Sampling Location

**Ambient Noise** 

To Check the Pollution Loads

IS:9989

Sound Level Meter N-3, TFL Guest House

Analysis Report

Sr. No.	Date of Sampling	Test Result dB(A) Day Time	Test Result dB(A) Night Time	Test Method
1	04/11/2024	52.2	40.5	IS9989
2	07/11/2024	54.4	41.2	IS 9989
3	11/11/2024	55.5	40.5	IS 9989
4	14/11/2024	52.2	42.2	IS 9989
5	18/11/2024	48.5	42.2	IS 9989
6	21/11/2024	50.2	42.2	IS 9989
7	25/11/2024	50.5	45.5	IS 9989
8	28/11/2024	48.8	42.2	IS 9989

Area Code	Category of Area	Limits	dB (A) Leq
		Day Time (6AM - 10PM)	Night Time (10PM - 06AM)
A	Industrial Area	75	70
В	Commercial Area	65	55
С	Residential Area	55	45
D	Silence Zone	50	40



Post Vikrampur, Distt. Angul-759 106

Odisha, India

ULR No.: Test Report Date: TC148142400000109F,140F,242F, 270F,326F,406F,464F,547F

09/12/2024

Sample Particulars

Nature of the Sample Purpose of Monitoring Method of Sampling Instrument Used Sampling Location

**Ambient Noise** 

To Check the Pollution Loads

IS:9989

Sound Level Meter N-4, Balanda House

**Analysis Report** 

Sr. No.	Date of Sampling	Test Result dB(A) Day Time	Test Result dB(A) Night Time	Test Method
1	04/11/2024	51.5	42.2	IS9989
2	07/11/2024	50.5	40.5	IS 9989
3	11/11/2024	48.8	43.5	IS 9989
4	14/11/2024	50.2	42.8	IS 9989
5	18/11/2024	48.8	37.8	IS 9989
6	21/11/2024	47.2	39.5	IS 9989
7	25/11/2024	50.5	40.5	IS 9989
8	28/11/2024	51.5	42.5	IS 9989

Area Code	Category of Area	Limits dB (A) Leq	
		Day Time (6AM - 10PM)	Night Time (10PM - 06AM)
A	Industrial Area	75	70
В	Commercial Area	65	55
С	Residential Area	55	45
D	Silence Zone	50	40



Post Vikrampur, Distt. Angul-759 106

Odisha, India

ULR No.: Test Report Date: TC148142400000110F,141F,243F, 271F,327F,407F,465F,548F

09/12/2024

Sample Particulars

Nature of the Sample Purpose of Monitoring Method of Sampling Instrument Used Sampling Location Ambient Noise

To Check the Pollution Loads

IS:9989

Sound Level Meter N-5, Karnapur Village

**Analysis Report** 

Sr. No.	Date of Sampling	Test Result dB(A) Day Time	Test Result dB(A) Night Time	Test Method
1	04/11/2024	50.5	38.8	IS9989
2	07/11/2024	52.5	40.5	IS 9989
3	11/11/2024	54.8	42.5	IS 9989
4	14/11/2024	50.5	40.5	IS 9989
5	18/11/2024	45.5	45.8	IS 9989
6	21/11/2024	48.5	40.4	IS 9989
7	25/11/2024	50.5	42.5	IS 9989
8	28/11/2024	45.8	45.5	IS 9989

Area Code	Category of Area	Limits	dB (A) Leq
	Day Time (6AM - 10PM)	Night Time (10PM - 06AM)	
A	Industrial Area	75	70
В	Commercial Area	65	55
С	Residential Area	55	45
D	Silence Zone	50	40



Post Vikrampur, Distt. Angul-759 106 Odisha, India ULR No.:

TC148142400000111F,142F,244F, 272F,328F,408F,466F,549F

Test Report Date: 09/12/2024

Sample Particulars

Nature of the Sample Purpose of Monitoring Method of Sampling Instrument Used Sampling Location **Ambient Noise** 

To Check the Pollution Loads

IS:9989

Sound Level Meter N-6, Kukudanga Village

**Analysis Report** 

Sr. No.	Date of Sampling	Test Result dB(A) Day Time	Test Result dB(A) Night Time	Test Method
1	04/11/2024	50.5	38.5	IS9989
2	07/11/2024	52.2	40.5	IS 9989
3	11/11/2024	54.5	44.5	IS 9989
4	14/11/2024	52.5	45.8	IS 9989
5	18/11/2024	52.2	35.5	IS 9989
6	21/11/2024	45.3	40.8	IS 9989
7	25/11/2024	47.7	36.9	IS 9989
8	28/11/2024	50.5	42.5	IS 9989

Area Code	Category of Area	Limits	dB (A) Leq
		Day Time (6AM - 10PM)	Night Time (10PM - 06AM)
A	Industrial Area	75	70
В	Commercial Area	65	55
С	Residential Area	55	45
D	Silence Zone	50	40



Post Vikrampur, Distt. Angul-759 106

Odisha, India

ULR No .: Test Report Date: TC148142400000630F,726F,798F,864F,947F,996F,1135F, 1212F

02/01/2025

Sample Particulars

Nature of the Sample Purpose of Monitoring Method of Sampling

Instrument Used

Sampling Location

**Ambient Noise** 

To Check the Pollution Loads

IS:9989

Sound Level Meter N-1, TFL Admin Building

Analysis Report

Sr. No.	Date of Sampling	Test Result dB(A) Day Time	Test Result dB(A) Night Time	Test Method
1	02/12/2024	52.5	36.7	159989
2	05/12/2024	51.4	39.6	IS 9989
3	09/12/2025	53.4	42.7	IS 9989
4	12/12/2024	51.8	43.1	IS 9989
5	16/12/2024	50.9	42.8	IS 9989
6	19/12/2024	52.8	40.6	IS 9989
7	23/12/2024	54.8	42.8	IS 9989
8	26/12/2024	48.6	39.3	IS 9989

Area Code	Category of Area	Limits	dB (A) Leq
		Day Time (6AM - 10PM)	Night Time (10PM - 06AM)
A	Industrial Area	75	70
В	Commercial Area	65	55
С	Residential Area	55	45
D	Silence Zone	.50	40



Post Vikrampur, Distt. Angul-759 106

Odisha, India

ULR No .:

TC148142400000631F,727F,799F,865F,948F,997F,1136F, 1213F

Test Report Date: 02/01/2025

Sample Particulars

Nature of the Sample Purpose of Monitoring Method of Sampling

Instrument Used Sampling Location **Ambient Noise** 

To Check the Pollution Loads

IS:9989

Sound Level Meter N-2, H.B.Colony

**Analysis Report** 

Sr. No.	Date of Sampling	Test Result dB(A) Day Time	Test Result dB(A) Night Time	Test Method
1	02/12/2024	54.9	44.3	IS9989
2	05/12/2024	53.4	42.9	IS 9989
3	09/12/2025	52.9	43.5	IS 9989
4	12/12/2024	49.7	42.6	IS 9989
5	16/12/2024	51.7	38.6	IS 9989
6	19/12/2024	53.5	41.1	IS 9989
7	23/12/2024	52.1	40.5	IS 9989
8	26/12/2024	48.6	42.2	IS 9989

Area Code	Category of Area Lim	dB (A) Leq	
		Day Time (6AM - 10PM)	Night Time (10PM - 06AM)
A	Industrial Area	75	70
В	Commercial Area	65	55
С	Residential Area	55	45
D	Silence Zone	50	40



Post Vikrampur, Distt. Angul-759 106

Test Report Date:

ULR No .:

TC148142400000632F,728F,800F,866F,949F,998F,1137F, 1214F

02/01/2025 Odisha, India

Sample Particulars

Nature of the Sample Purpose of Monitoring Method of Sampling Instrument Used Sampling Location

**Ambient Noise** 

To Check the Pollution Loads

IS:9989

Sound Level Meter N-3, TFL Guest House

**Analysis Report** 

Sr. No.	Date of Sampling	Test Result dB(A) Day Time	Test Result dB(A) Night Time	Test Method
1	02/12/2024	53.4	42.6	IS9989
2	05/12/2024	53.8	40.9	IS 9989
3	09/12/2025	54.5	43.6	IS 9989
4	12/12/2024	51.3	40.2	IS 9989
5	16/12/2024	50.8	39.5	IS 9989
6	19/12/2024	48.9	41.2	IS 9989
7	23/12/2024	49.3	44.2	IS 9989
8	26/12/2024	50.2	43.7	IS 9989

	Category of Area	Limits	dB (A) Leq
		Day Time (6AM - 10PM)	Night Time (10PM - 06AM)
A	Industrial Area	75	70
В	Commercial Area	65	55
С	Residential Area	55	45
D	Silence Zone	50	40



Post Vikrampur, Distt. Angul-759 106

Odisha, India

ULR No.: Test Report Date: TC148142400000633F,729F,801F,867F,950F,999F,1138F, 1215F

02/01/2025

Sample Particulars

Nature of the Sample Purpose of Monitoring Method of Sampling Instrument Used Sampling Location : Ambient Noise

To Check the Pollution Loads

IS:9989

Sound Level Meter N-4, Balanda House

**Analysis Report** 

Sr. No.	Date of Sampling	Test Result dB(A) Day Time	Test Result dB(A) Night Time	Test Method
1	02/12/2024	52.5	40.8	IS9989
2	05/12/2024	53.4	42.6	IS 9989
3	09/12/2025	50.3	41.8	IS 9989
4	12/12/2024	49.3	44.2	IS 9989
5	16/12/2024	51.4	39.6	IS 9989
6	19/12/2024	48.3	37.3	IS 9989
7	23/12/2024	52.5	42.1	IS 9989
8	26/12/2024	53.6	40.7	IS 9989

Area Code	Category of Area	Limits	dB (A) Leq
	Day Time (6AM 10PM)	Night Time (10PM - 06AM)	
A	Industrial Area	75	70
В	Commercial Area	65	55
С	Residential Area	55	45
D	Silence Zone	50	40



Post Vikrampur, Distt. Angul-759 106

Odisha, India

ULR No .:

Test Report Date:

TC148142400000634F,730F,802F,868F,951F,1000F,1139F, 1216F

02/01/2025

Sample Particulars

Nature of the Sample Purpose of Monitoring Method of Sampling Instrument Used Sampling Location **Ambient Noise** 

To Check the Pollution Loads

IS:9989

Sound Level Meter N-5, Karnapur Village

Analysis Report

Sr. No.	Date of Sampling	Test Result dB(A) Day Time	Test Result dB(A) Night Time	Test Method
1	02/12/2024	53.1	39.3	IS9989
2	05/12/2024	50.8	41.5	IS 9989
3	09/12/2025	52.9	40.9	IS 9989
4	12/12/2024	52.9	38.5	IS 9989
5	16/12/2024	47.6	44.1	IS 9989
6	19/12/2024	49.5	42.5	IS 9989
7	23/12/2024	52.4	40.9	IS 9989
8	26/12/2024	46.9	42.2	IS 9989

Area Code	Category of Area	Limits	dB (A) Leq
		Day Time (6AM - 10PM)	Night Time (10PM - 06AM)
A	Industrial Area	75	70
В	Commercial Area	65	55
C	Residential Area	55	45
D	Silence Zone	50	40



ULR No.:

TC148142400000635F,731F,803F,869F,952F,1001F,1140F, 1217F

Post Vikrampur, Distt. Angul-759 106

Test Report Date:

02/01/2025

Odisha, India

Sample Particulars

**Ambient Noise** 

To Check the Pollution Loads

IS:9989

Purpose of Monitoring Method of Sampling Instrument Used

Nature of the Sample

Sound Level Meter

Sampling Location

N-6, Kukudanga Village

**Analysis Report** 

Sr. No.	Date of Sampling	Test Result dB(A) Day Time	Test Result dB(A) Night Time	Test Method
1	02/12/2024	49.6	36.6	IS9989
2	05/12/2024	51.5	38.9	IS 9989
3	09/12/2025	53.6	43.2	IS 9989
4	12/12/2024	50.8	44.3	IS 9989
5	16/12/2024	53.1	38.5	IS 9989
6	19/12/2024	47.6	42.1	IS 9989
7	23/12/2024	46.2	37.6	IS 9989
8	26/12/2024	49.5	40.9	IS 9989

Area Code	Category of Area	Limits	dB (A) Leq
		Day Time (6AM - 10PM)	Night Time (10PM - 06AM)
Α	Industrial Area	75	70
В	Commercial Area	65	55
С	Residential Area	55	45
D	Silence Zone	50	40



Post Vikrampur, Distt. Angul-759 106 Odisha, India

ULR No .:

TC148142500000048F,105F,186F,230F,267F,336F,443F,503F

Test Report Date: 08/02/2025

Sample Particulars

Nature of the Sample Purpose of Monitoring Method of Sampling

Instrument Used

Sampling Location

**Ambient Noise** 

To Check the Pollution Loads

IS:9989

Sound Level Meter N-1, TFL Admin Building

**Analysis Report** 

Sr. No.	Date of Sampling	Test Result dB(A) Day Time	Test Result dB(A) Night Time	Test Method
1	02/01/2025	51.5	36.4	159989
2	06/01/2025	53.6	39.4	IS 9989
3	13/01/2025	49.2	41.5	IS 9989
4	16/01/2025	52.8	44.8	IS 9989
5	18/01/2025	53.4	40.9	IS 9989
6	20/01/2025	53.9	38.4	IS 9989
7	23/01/2025	51.1	39.6	IS 9989
8	27/01/2025	52.8	37.6	IS 9989
9	30/01/2025	54.6	43.7	IS 9989

Area Code	Category of Area	Limits dB (A) Leq	
		Day Time (6AM - 10PM)	Night Time (10PM - 06AM)
A	Industrial Area	75	70
В	Commercial Area	65	55
С	Residential Area	55	45
D	Silence Zone	50	40



Post Vikrampur, Distt. Angul-759 106

Odisha, India

ULR No .:

TC148142500000049F,106F,187F,231F,268F,337F,444F,504F

Test Report Date: 08/02/2025

Sample Particulars

Nature of the Sample Purpose of Monitoring Method of Sampling Instrument Used Sampling Location

: Ambient Noise

To Check the Pollution Loads

IS:9989

Sound Level Meter N-2, H.B.Colony

**Analysis Report** 

Sr. No.	Date of Sampling	Test Result dB(A) Day Time	Test Result dB(A) Night Time	Test Method
1	02/01/2025	54.8	44.3	IS9989
2	06/01/2025	54.1	44.9	IS 9989
3	13/01/2025	49.5	38.9	IS 9989
4	16/01/2025	50.4	42.6	IS 9989
5	18/01/2025	52.7	41.8	IS 9989
6	20/01/2025	53.9	40.3	IS 9989
7	23/01/2025	52.1	42.3	IS 9989
8	27/01/2025	50.6	40.9	IS 9989
9	30/01/2025	53.1	43.3	IS 9989

Area Code	Category of Area	Limits	dB (A) Leq
		Day Time (6AM - 10PM)	Night Time (10PM - 06AM)
A	Industrial Area	75	70
В	Commercial Area	65	55
С	Residential Area	55	45
D	Silence Zone	50	40



Post Vikrampur, Distt. Angul-759 106

Odisha, India

ULR No.: Test Report Date: TC148142500000050F,107F,188F,232F,269F,338F,445F,505F

08/02/2025

Sample Particulars

Nature of the Sample Purpose of Monitoring Method of Sampling Instrument Used Sampling Location : Ambient Noise

To Check the Pollution Loads

IS:9989

Sound Level Meter N-3, TFL Guest House

**Analysis Report** 

Sr. No.	Date of Sampling	Test Result dB(A) Day Time	Test Result dB(A) Night Time	Test Method
1	02/01/2025	50.5	39.8	IS9989
2	06/01/2025	53.9	42.4	IS 9989
3	13/01/2025	50.8	40.4	IS 9989
4	16/01/2025	46.9	38.9	IS 9989
5	18/01/2025	48.5	40.3	IS 9989
6	20/01/2025	49.3	41.8	IS 9989
7	23/01/2025	50.4	40.6	IS 9989
8	27/01/2025	52.7	42.9	IS 9989
9	30/01/2025	53.9	44.1	IS 9989

Area Code	Category of Area	Limits	dB (A) Leq
		Day Time (6AM - 10PM)	Night Time (10PM - 06AM)
Α	Industrial Area	75	70
В	Commercial Area	65	55
С	Residential Area	55	45
D	Silence Zone	50	40



Post Vikrampur, Distt. Angul-759 106 Odisha, India ULR No.:

TC148142500000051F,108F,189F,233F,270F,339F,446F,506F 08/02/2025

Angul-759 106 Test Report Date:

Sample Particulars

Nature of the Sample Purpose of Monitoring Method of Sampling Instrument Used

Sampling Location

: Ambient Noise

To Check the Pollution Loads

IS:9989

Sound Level Meter N-4, Balanda House

**Analysis Report** 

Sr. No.	Date of Sampling	Test Result dB(A) Day Time	Test Result dB(A) Night Time	Test Method
1	02/01/2025	52.3	41.7	IS9989
2	06/01/2025	51.8	42.6	IS 9989
3	13/01/2025	48.6	43.9	IS 9989
4	16/01/2025	51.9	39.9	IS 9989
5	18/01/2025	49.6	38.6	IS 9989
6	20/01/2025	47.3	36.9	IS 9989
7	23/01/2025	49.2	38.6	IS 9989
8	27/01/2025	52.4	41.9	IS 9989
9	30/01/2025	50.9	40.2	IS 9989

Area Code	Category of Area	Limits	dB (A) Leq
		Day Time (6AM - 10PM)	Night Time (10PM - 06AM)
A	Industrial Area	75	70
В	Commercial Area	65	55
С	Residential Area	55	45
D	Silence Zone	50	40



Post Vikrampur, Distt. Angul-759 106

Odisha, India

ULR No .:

TC148142500000052F,109F,190F,234F,271F,340F,447F,507F

Test Report Date: 08/02/2025

Sample Particulars

Nature of the Sample Purpose of Monitoring Method of Sampling Instrument Used

Sampling Location

: Ambient Noise

To Check the Pollution Loads

IS:9989

Sound Level Meter N-5, Karnapur Village

**Analysis Report** 

Sr. No.	Date of Sampling	Test Result dB(A) Day Time	Test Result dB(A) Night Time	Test Method
1	02/01/2025	48.7	37.6	IS9989
2	06/01/2025	50.4	39.8	IS 9989
3	13/01/2025	52.4	42.7	IS 9989
4	16/01/2025	46.8	38.9	IS 9989
5	18/01/2025	49.3	40.2	IS 9989
6	20/01/2025	52.8	43.9	IS 9989
7	23/01/2025	48.7	45.3	IS 9989
8	27/01/2025	44.2	33.9	IS 9989
9	30/01/2025	48.9	39.8	IS 9989

Area Code	Category of Area	Limits dB (A) Leq	
		Day Time (6AM - 10PM)	Night Time (10PM - 06AM)
A	Industrial Area	75	70
В	Commercial Area	65	55
С	Residential Area	55	45
D	Silence Zone	50	40



Post Vikrampur, Distt. Angul-759 106

ULR No.: Test Report Date: 08/02/2025

TC148142500000053F,110F,191F,235F,272F,341F,448F,508F

Odisha, India

Sample Particulars

Nature of the Sample Purpose of Monitoring Method of Sampling

Instrument Used

Sampling Location

**Ambient Noise** 

To Check the Pollution Loads

IS:9989

Sound Level Meter N-6, Kukudanga Village

**Analysis Report** 

Sr. No.	Date of Sampling	Test Result dB(A) Day Time	Test Result dB(A) Night Time	Test Method
1	02/01/2025	52.5	37.5	IS9989
2	06/01/2025	50.9	41.5	IS 9989
3	13/01/2025	48.9	39.4	IS 9989
4	16/01/2025	50.3	38.7	IS 9989
5	18/01/2025	47.5	40.1	IS 9989
6	20/01/2025	49.6	38.9	IS 9989
7	23/01/2025	52.8	41.9	IS 9989
8	27/01/2025	54.3	43.8	IS 9989
9	30/01/2025	53.1	42.2	IS 9989

Area Code	Category of Area	Limits	dB (A) Leq
		Day Time (6AM - 10PM)	Night Time (10PM - 06AM)
A	Industrial Area	75	70
В	Commercial Area	65	55
С	Residential Area	55	45
D	Silence Zone	50	40



Post Vikrampur, Distt. Angul-759 106

ULR No .: Test Report Date: TC148142500000583F,665F,749F,815F,874F,1024F,1131F,1192F

Odisha, India

06/03/2025

Sample Particulars

Nature of the Sample Purpose of Monitoring Method of Sampling Instrument Used Sampling Location

**Ambient Noise** 

To Check the Pollution Loads

IS:9989

Sound Level Meter

N-1, TFL Admin Building

## **Analysis Report**

Sr. No.	Date of Sampling	Test Result dB(A) Day Time	Test Result dB(A) Night Time	Test Method
1	03/02/2025	52.2	35.6	IS9989
2	06/02/2025	51.6	38.1	IS 9989
3	10/02/2025	51.1	42.8	IS 9989
4	13/02/2025	50.5	42.1	IS 9989
5	17/02/2025	51.6	43.6	IS 9989
6	20/02/2025	50.6	40.8	IS 9989
7	23/02/2025	51.2	39.6	IS 9989
8	24/02/2025	53.3	36.6	IS 9989
9	27/02/2025	52.4	41.4	IS 9989

Area Code	Category of Area	Limits dB (A) Leq	
		Day Time (6AM - 10PM)	Night Time (10PM - 06AM)
A	Industrial Area	75	70
В	Commercial Area	65	55
С	Residential Area	55	45
D	Silence Zone	50	40



Post Vikrampur, Distt. Angul-759 106

Odisha, India

ULR No.: Test Report Date: TC148142500000584F,666F,750F,816F,875F,1025F,1132F,1193F

06/03/2025

Sample Particulars

Nature of the Sample Purpose of Monitoring Method of Sampling Instrument Used

Sampling Location

: Ambient Noise

To Check the Pollution Loads

IS:9989

Sound Level Meter N-2, H.B.Colony

**Analysis Report** 

Sr. No.	Date of Sampling	Test Result dB(A) Day Time	Test Result dB(A) Night Time	Test Method
1	03/02/2025	52.7	42.8	1S9989
2	06/02/2025	53.3	43.4	IS 9989
3	10/02/2025	51.1	39.5	IS 9989
4	13/02/2025	48.3	40.4	IS 9989
5	17/02/2025	50.4	39.3	IS 9989
6	20/02/2025	51.4	41.7	IS 9989
7	23/02/2025	50.3	43.1	IS 9989
8	24/02/2025	49.3	42.7	IS 9989
9	27/02/2025	52.4	41.9	IS 9989

Area Code	Category of Area	Limits dB (A) Leq	
		Day Time (6AM - 10PM)	Night Time (10PM - 06AM)
Α	Industrial Area	75	70
В	Commercial Area	65	55
C	Residential Area	55	45
D	Silence Zone	50	40



Post Vikrampur, Distt. Angul-759 106 Odisha, India ULR No.:

TC148142500000585F,667F,751F,817F,876F,1026F,1133F,1194F

Test Report Date: 06/03/2025

Sample Particulars

Nature of the Sample Purpose of Monitoring Method of Sampling

Instrument Used

Sampling Location

Ambient Noise

To Check the Pollution Loads

IS:9989

Sound Level Meter N-3, TFL Guest House

**Analysis Report** 

Sr. No.	Date of Sampling	Test Result dB(A) Day Time	Test Result dB(A) Night Time	Test Method
1	03/02/2025	51.7	41.2	IS9989
2	06/02/2025	54.1	40.6	IS 9989
3	10/02/2025	52.4	38.4	IS 9989
4	13/02/2025	47.9	39.3	IS 9989
5	17/02/2025	50.1	41.4	IS 9989
6	20/02/2025	46.4	40.7	IS 9989
7	23/02/2025	48.5	43.1	IS 9989
8	24/02/2025	50.4	40.8	IS 9989
9	27/02/2025	51.9	42.4	IS 9989

Area Code	Category of Area	Limits dB (A) Leq	
		Day Time (6AM - 10PM)	Night Time (10PM - 06AM)
A	Industrial Area	75	70
В	Commercial Area	65	55
С	Residential Area	55	45
D	Silence Zone	50	40



Post Vikrampur, Distt. Angul-759 106 Odisha, India ULR No.:

TC148142500000586F,668F,752F,818F,877F,1027F,1134F,1195F

Test Report Date: 06/03/2025

Sample Particulars

Nature of the Sample Purpose of Monitoring Method of Sampling Instrument Used Sampling Location : Ambient Noise

To Check the Pollution Loads

IS:9989

Sound Level Meter N-4, Balanda House

**Analysis Report** 

Sr. No.	Date of Sampling	Test Result dB(A) Day Time	Test Result dB(A) Night Time	Test Method
1	03/02/2025	53.7	43.4	IS9989
2	06/02/2025	50.4	41.4	IS 9989
3	10/02/2025	46.7	40.8	IS 9989
4	13/02/2025	49.5	41.9	IS 9989
5	17/02/2025	51.4	42.8	IS 9989
6	20/02/2025	49.3	37.3	IS 9989
7	23/02/2025	52.3	39.7	IS 9989
8	24/02/2025	50.4	43.8	IS 9989
9	27/02/2025	53.7	42.4	IS 9989

Area Code	Category of Area	Limits dB (A) Leq	
		Day Time (6AM - 10PM)	Night Time (10PM - 06AM)
A	Industrial Area	75	70
В	Commercial Area	65	55
С	Residential Area	55	45
D	Silence Zone	50	40



Post Vikrampur, Distt. Angul-759 106 Odisha, India

ULR No.:

TC148142500000587F,669F,753F,819F,878F,1028F,1135F,1196F

Test Report Date:

06/03/2025

Sample Particulars

Nature of the Sample Purpose of Monitoring Method of Sampling Instrument Used

Sampling Location

**Ambient Noise** 

To Check the Pollution Loads

IS:9989

Sound Level Meter

N-5, Karnapur Village

**Analysis Report** 

Sr. No.	Date of Sampling	Test Result dB(A) Day Time	Test Result dB(A) Night Time	Test Method
1	03/02/2025	49.5	39.4	IS9989
2	06/02/2025	52.4	41.4	IS 9989
3	10/02/2025	50.4	40.8	IS 9989
4	13/02/2025	48.6	36.7	IS 9989
5	17/02/2025	51.4	42.8	IS 9989
6	20/02/2025	54.3	41.7	IS 9989
7	23/02/2025	52.9	42.3	IS 9989
8	24/02/2025	46.5	35.2	IS 9989
9	27/02/2025	47.1	37.6	IS 9989

Area Code	Category of Area	Limits dB (A) Leq	
		Day Time (6AM - 10PM)	Night Time (10PM - 06AM)
A	Industrial Area	75	70
В	Commercial Area	65	55
С	Residential Area	55	45
D	Silence Zone	50	40



Post Vikrampur, Distt. Angul-759 106

ULR No.: Test Report Date:

TC148142500000588F,670F,754F,820F,879F,1029F,1136F,1197F

Odisha, India

06/03/2025

Sample Particulars

Nature of the Sample Purpose of Monitoring Method of Sampling Instrument Used Sampling Location : Ambient Noise

To Check the Pollution Loads

IS:9989

Sound Level Meter N-6, Kukudanga Village

**Analysis Report** 

Sr. No.	Date of Sampling	Test Result dB(A) Day Time	Test Result dB(A) Night Time	Test Method
1	03/02/2025	51.1	39.5	IS9989
2	06/02/2025	53.1	42.4	IS 9989
3	10/02/2025	46.4	41.8	IS 9989
4	13/02/2025	49.2	36.7	IS 9989
5	17/02/2025	48.3	39.4	IS 9989
6	20/02/2025	51.7	41.1	IS 9989
7	23/02/2025	49.3	38.5	IS 9989
8	24/02/2025	53.4	42.7	IS 9989
9	27/02/2025	51.8	40.8	IS 9989

Area Code	Category of Area	Limits dB (A) Leq	
		Day Time (6AM - 10PM)	Night Time (10PM - 06AM)
A	Industrial Area	75	70
В	Commercial Area	65	55
С	Residential Area	55	45
D	Silence Zone	50	40



Post Vikrampur, Distt. Angul-759 106

Odisha, India

ULR No .:

TC148142500001274F,1324F,1382F,1428F,1480F,1610F,1756F,1856F

Test Report Date: 05/04/2025

Sample Particulars

Nature of the Sample Purpose of Monitoring

Method of Sampling Instrument Used Sampling Location **Ambient Noise** 

To Check the Pollution Loads

IS:9989

Sound Level Meter N-1, TFL Admin Building

**Analysis Report** 

Sr. No.	Date of Sampling	Test Result dB(A) Day Time	Test Result dB(A) Night Time	Test Method
1	03/03/2025	50.8	36.7	IS9989
2	06/03/2025	53.4	39.2	IS 9989
3	08/03/2025	48.7	43.7	IS 9989
4	10/03/2025	52.4	44.1	IS 9989
5	13/03/2025	54.1	40.7	IS 9989
6	17/03/2025	52.8	38.6	IS 9989
7	20/03/2025	53.3	36.2	IS 9989
8	24/03/2025	50.8	40.1	IS 9989
9	27/03/2025	49.7	42.8	IS 9989

Area Code	Category of Area	Limits	dB (A) Leq
		Day Time (6AM - 10PM)	Night Time (10PM - 06AM)
A	Industrial Area	75	70
В	Commercial Area	65	55
С	Residential Area	55	45
D	Silence Zone	50	40



Post Vikrampur, Distt. Angul-759 106

Odisha, India

ULR No.:

TC148142500001275F,1325F,1383F,1429F,1481F,1611F,1757F,1857F

Test Report Date: 05/04/2025

Sample Particulars

Nature of the Sample Purpose of Monitoring

Method of Sampling Instrument Used Sampling Location Ambient Noise

To Check the Pollution Loads

IS:9989

Sound Level Meter N-2, H.B.Colony

**Analysis Report** 

Sr. No.	Date of Sampling	Test Result dB(A) Day Time	Test Result dB(A) Night Time	Test Method
1	03/03/2025	50.4	40.8	IS9989
2	06/03/2025	51.7	41.4	IS 9989
3	08/03/2025	47.9	40.6	IS 9989
4	10/03/2025	49.6	38.2	IS 9989
5	13/03/2025	52.4	41.9	IS 9989
6	17/03/2025	49.3	39.7	IS 9989
7	20/03/2025	53.7	42.7	IS 9989
8	24/03/2025	51.7	43.8	IS 9989
9	27/03/2025	50.6	42.6	IS 9989

Area Code	Category of Area	Limits dB (A) Leq	
		Day Time (6AM - 10PM)	Night Time (10PM - 06AM)
A	Industrial Area	75	70
В	Commercial Area	65	55
С	Residential Area	55	45
D	Silence Zone	50	40



Post Vikrampur, Distt. Angul-759 106

Odisha, India

ULR No .:

TC148142500001276F,1326F,1384F,1430F,1482F,1612F,1758F,1858F

Test Report Date: 05/04/2025

Sample Particulars

Nature of the Sample Purpose of Monitoring

Method of Sampling Instrument Used Sampling Location **Ambient Noise** 

To Check the Pollution Loads

IS:9989

Sound Level Meter N-3, TFL Guest House

**Analysis Report** 

Sr. No.	Date of Sampling	Test Result dB(A) Day Time	Test Result dB(A) Night Time	Test Method
1	03/03/2025	52.5	40.4	IS9989
2	06/03/2025	52.9	42.6	IS 9989
3	08/03/2025	53.7	39.7	IS 9989
4	10/03/2025	49.5	39.3	IS 9989
5	13/03/2025	48.2	43.4	IS 9989
6	17/03/2025	47.3	42.4	IS 9989
7	20/03/2025	49.6	40.8	IS 9989
8	24/03/2025	52.7	38.1	IS 9989
9	27/03/2025	53.5	41.6	IS 9989

Area Code	Category of Area	Limits dB (A) Leq	
	Day Time (6AM - 10PM)	Night Time (10PM - 06AM)	
A	Industrial Area	75	70
В	Commercial Area	65	55
С	Residential Area	55	45
D	Silence Zone	50	40



Post Vikrampur, Distt. Angul-759 106

Post Vikrampur, Distt. Angul-7: Odisha, India ULR No.:

TC148142500001277F,1327F,1385F,1431F,1483F,1613F,1759F,1859F

Test Report Date: 05/04/2025

Sample Particulars

Nature of the Sample Purpose of Monitoring

Method of Sampling Instrument Used Sampling Location Ambient Noise

To Check the Pollution Loads

IS:9989

Sound Level Meter N-4, Balanda House

**Analysis Report** 

Sr. No.	Date of Sampling	Test Result dB(A) Day Time	Test Result dB(A) Night Time	Test Method
1	03/03/2025	51.7	41.4	IS9989
2	06/03/2025	52.9	43.4	IS 9989
3	08/03/2025	48.7	42.5	IS 9989
4	10/03/2025	51.7	43.7	IS 9989
5	13/03/2025	53.7	40.7	IS 9989
6	17/03/2025	51.8	39.5	IS 9989
7	20/03/2025	50.7	41.7	IS 9989
8	24/03/2025	48.5	42.5	IS 9989
9	27/03/2025	50.9	44.1	IS 9989

Area Code	Category of Area	Limits	dB (A) Leq
		Day Time (6AM - 10PM)	Night Time (10PM - 06AM)
Α	Industrial Area	75	70
В	Commercial Area	65	55
С	Residential Area	55	45
D	Silence Zone	50	40



Post Vikrampur, Distt. Angul-759 106

Odisha, India

ULR No.:

Test Report Date:

TC148142500001278F,1328F,1386F,1432F,1484F,1614F,1760F,1860F

05/04/2025

Sample Particulars

Nature of the Sample Purpose of Monitoring Method of Sampling Instrument Used

Sampling Location

Ambient Noise

To Check the Pollution Loads

IS:9989

Sound Level Meter N-5, Karnapur Village

**Analysis Report** 

Sr. No.	Date of Sampling	Test Result dB(A) Day Time	Test Result dB(A) Night Time	Test Method
1	03/03/2025	51.4	41.5	IS9989
2	06/03/2025	50.8	43.4	IS 9989
3	08/03/2025	52.6	41.8	IS 9989
4	10/03/2025	50.4	38.7	IS 9989
5	13/03/2025	49.2	40.4	IS 9989
6	17/03/2025	52.6	43.6	IS 9989
7	20/03/2025	53.6	40.7	IS 9989
8	24/03/2025	48.7	36.9	IS 9989
9	27/03/2025	49.6	36.3	IS 9989

Area Code	Category of Area	Limits	dB (A) Leq
		Day Time (6AM - 10PM)	Night Time (10PM - 06AM)
A	Industrial Area	75	70
В	Commercial Area	65	55
С	Residential Area	55	45
D	Silence Zone	50	40



Odisha, India

Post Vikrampur, Distt. Angul-759 106

ULR No .:

TC148142500001279F,1329F,1387F,1433F,1485F,1615F,1761F,1861F

Test Report Date: 05/04/2025

Sample Particulars

Nature of the Sample

Purpose of Monitoring Method of Sampling Instrument Used

Sampling Location

**Ambient Noise** 

To Check the Pollution Loads

IS:9989

Sound Level Meter

N-6, Kukudanga Village

**Analysis Report** 

Sr. No.	Date of Sampling	Test Result dB(A) Day Time	Test Result dB(A) Night Time	Test Method
1	03/03/2025	50.4	41.1	IS9989
2	06/03/2025	52.3	43.5	IS 9989
3	08/03/2025	48.6	40.5	IS 9989
4	10/03/2025	51.4	38.3	IS 9989
5	13/03/2025	49.3	36.7	IS 9989
6	17/03/2025	52.6	42.9	IS 9989
7	20/03/2025	53.7	40.1	IS 9989
8	24/03/2025	52.1	39.4	IS 9989
9	27/03/2025	54.1	37.9	IS 9989

Area Code	Category of Area	Limits	dB (A) Leq
		Day Time (6AM - 10PM)	Night Time (10PM - 06AM)
Α	Industrial Area	75	70
В	Commercial Area	65	55
С	Residential Area	55	45
D	Silence Zone	50	40



ULR No .:

TC148142500002116F,2179F,2231F,2277F,2363F,2432F,2495F,2534F,

2650F

Post Vikrampur, Distt. Angul-759 106

Odisha, India

Test Report Date:

08/05/2025

Sample Particulars

Nature of the Sample

Purpose of Monitoring Method of Sampling

Method of Sampling Instrument Used Sampling Location **Ambient Noise** 

To Check the Pollution Loads

IS:9989

: Sound Level Meter : N-1, TFL Admin Building

**Analysis Report** 

Sr. No.	Date of Sampling	Test Result dB(A) Day Time	Test Result dB(A) Night Time	Test Method
1	01/04/2025	52.5	37.5	IS9989
2	03/04/2025	51.8	41.6	IS 9989
3	07/04/2025	50.9	42.7	IS 9989
4	10/04/2025	50.1	42.9	IS 9989
5	14/04/2025	51.9	38.5	IS 9989
6	17/04/2025	49.3	36.4	IS 9989
7	21/04/2025	50.8	37.3	IS 9989
8	24/04/2025	47.3	42.7	IS 9989
9	28/04/2025	46.9	43.9	IS 9989

Area Code	Category of Area	Limits	dB (A) Leq
		Day Time (6AM - 10PM)	Night Time (10PM - 06AM)
Α	Industrial Area	75	70
В	Commercial Area	65	55
С	Residential Area	55	45
D	Silence Zone	50	40



Odisha, India

ULR No.:

TC148142500002117F,2180F,2232F,2278F,2364F,2433F,2496F,2535F,

Post Vikrampur, Distt. Angul-759 106

Test Report Date:

08/05/2025

Sample Particulars

Nature of the Sample Purpose of Monitoring **Ambient Noise** 

Method of Sampling Instrument Used Sampling Location

To Check the Pollution Loads

IS:9989

Sound Level Meter N-2, H.B.Colony

## **Analysis Report**

Sr. No.	Date of Sampling	Test Result dB(A) Day Time	Test Result dB(A) Night Time	Test Method
1	01/04/2025	52.8	42.8	IS9989
2	03/04/2025	53.7	38.9	IS 9989
3	07/04/2025	48.9	39.5	IS 9989
4	10/04/2025	46.8	40.6	IS 9989
5	14/04/2025	50.8	42.9	IS 9989
6	17/04/2025	51.6	41.6	IS 9989
7	21/04/2025	52.4	39.4	IS 9989
8	24/04/2025	48.9	40.8	IS 9989
9	28/04/2025	48.6	40.6	IS 9989

Area Code	Category of Area	Limits dB (A) Leq	
		Day Time (6AM - 10PM)	Night Time (10PM - 06AM)
A	Industrial Area	75	70
В	Commercial Area	65	55
С	Residential Area	55	45
D	Silence Zone	50	40



ULR No .:

TC148142500002118F,2181F,2233F,2279F,2365F,2434F,2497F,2536F,

2652F

Post Vikrampur, Distt. Angul-759 106

Odisha, India

Test Report Date:

08/05/2025

Sample Particulars

Nature of the Sample Purpose of Monitoring Method of Sampling

Instrument Used

Sampling Location

**Ambient Noise** 

To Check the Pollution Loads

IS:9989

Sound Level Meter N-3, TFL Guest House

**Analysis Report** 

Sr. No.	Date of Sampling	Test Result dB(A) Day Time	Test Result dB(A) Night Time	Test Method
1	01/04/2025	50.4	38.9	IS9989
2	03/04/2025	51.5	40.4	IS 9989
3	07/04/2025	52.4	36.8	IS 9989
4	10/04/2025	51.8	37.4	IS 9989
5	14/04/2025	46.9	41.6	IS 9989
6	17/04/2025	48.9	40.8	IS 9989
7	21/04/2025	51.7	42.9	IS 9989
8	24/04/2025	53.8	40.5	IS 9989
9	28/04/2025	51.9	38.5	IS 9989

Area Code	Category of Area	Limits	dB (A) Leq
		Day Time (6AM - 10PM)	Night Time (10PM - 06AM)
Α	Industrial Area	75	70
В	Commercial Area	65	55
С	Residential Area	55	45
D	Silence Zone	50	40



ULR No .:

TC148142500002119F,2182F,2234F,2280F,2366F,2435F,2498F,2537F,

2653F

Post Vikrampur, Distt. Angul-759 106 Odisha, India

06 Test Report Date:

08/05/2025

Sample Particulars

Nature of the Sample

: To Check the Pollution Loads

Purpose of Monitoring Method of Sampling

IS:9989 Sound Level Meter

N-4, Balanda House

**Ambient Noise** 

Instrument Used Sampling Location

**Analysis Report** 

Sr. No.	Date of Sampling	Test Result dB(A) Day Time	Test Result dB(A) Night Time	Test Method
1	01/04/2025	48.9	42.4	IS9989
2	03/04/2025	51.4	41.6	IS 9989
3	07/04/2025	50.6	40.6	IS 9989
4	10/04/2025	53.5	41.7	IS 9989
5	14/04/2025	51.8	38.5	IS 9989
6	17/04/2025	48.5	36.3	IS 9989
7	21/04/2025	47.6	42.8	IS 9989
8	24/04/2025	46.2	41.2	IS 9989
9	28/04/2025	53.4	42.9	IS 9989

Area Code	Category of Area	Limits dB (A) Leq	
		Day Time (6AM - 10PM)	Night Time (10PM - 06AM)
A	Industrial Area	75	70
В	Commercial Area	65	55
С	Residential Area	55	45
D	Silence Zone	50	40



ULR No .:

TC148142500002120F,2183F,2235F,2281F,2367F,2436F,2499F,2538F,

2654F

Post Vikrampur, Distt. Angul-759 106

Odisha, India

Test Report Date:

08/05/2025

Sample Particulars

Nature of the Sample

Purpose of Monitoring Method of Sampling

Instrument Used Sampling Location **Ambient Noise** 

: To Check the Pollution Loads

IS:9989

Sound Level Meter N-5, Karnapur Village

**Analysis Report** 

Sr. No.	Date of Sampling	Test Result dB(A) Day Time	Test Result dB(A) Night Time	Test Method
1	01/04/2025	53.5	43.4	IS9989
2	03/04/2025	52.4	41.4	IS 9989
3	07/04/2025	50.9	40.2	IS 9989
4	10/04/2025	48.6	39.6	IS 9989
5	14/04/2025	47.5	38.5	IS 9989
6	17/04/2025	50.6	41.4	IS 9989
7	21/04/2025	51.6	37.5	IS 9989
8	24/04/2025	50.3	38.3	IS 9989
9	28/04/2025	52.8	39.1	IS 9989

Area Code	Category of Area	Limits	dB (A) Leq
		Day Time (6AM - 10PM)	Night Time (10PM - 06AM)
A	Industrial Area	75	70
В	Commercial Area	65	55
С	Residential Area	55	45
D	Silence Zone	50	40



ULR No .:

TC148142500002121F,2184F,2236F,2282F,2368F,2437F,2500F,2539F,

2655F

Post Vikrampur, Distt. Angul-759 106

Odisha, India

Test Report Date:

te: 08/05/2025

Sample Particulars

Nature of the Sample Purpose of Monitoring

: Ambient Noise : To Check the Pollution Loads

IS:9989

Method of Sampling Instrument Used Sampling Location

Sound Level Meter N-6, Kukudanga Village

**Analysis Report** 

Sr. No.	Date of Sampling	Test Result dB(A) Day Time	Test Result dB(A) Night Time	Test Method	
1	01/04/2025	51.5	40.5	IS9989	
2	03/04/2025	50.5	41.4	IS 9989	
3	07/04/2025	49.6	38.5	IS 9989	
4	10/04/2025	48.2	39.6	IS 9989	
5	14/04/2025	47.3	38.9	IS 9989	
6	17/04/2025	50.5	43.4	IS 9989	
7	21/04/2025	51.4	42.4	IS 9989	
8	24/04/2025	50.4	37.3	IS 9989	
9	28/04/2025	52.8	39.3	IS 9989	

Area Code	Category of Area	Limits dB (A) Leq					
		Day Time (6AM - 10PM)	Night Time (10PM - 06AM)				
A	Industrial Area	75	70				
В	Commercial Area	65	55				
C	Residential Area	55	45				
D	Silence Zone	50	40				



# Test Reports of Ground Water and Surface Water Quality Monitoring (November 2024 to April 2025)



Issued To M/s Talcher

M/s Talcher Fertilizers Limited

ULR No.:

TC148142400000550F

Post Vikrampur, Distt. Angul-759 106

Test Report Date:

10/12/2024

Sample Particulars

Nature of the Sample

**Ground Water** 

Sample Quantity & Packaging

Odisha, India

: 1 Liter, Pet Bottle

Sample Received at Lab

: 02/12/2024

Test Started on

02/12/2024

Test Completed

09/12/2024

Method of Sampling

SOP/B/D-3

Date of Sampling

28/11/2024

Place of Sampling

GW1-Tentulei Village

Sr. No.	Parameters	Unit	Test Results GW1	The contract of the party of th	ent as per IS: 00:2012	Protocol	
			0	Desirable	Permissible		
1	pH	-	7.62	6.5-8.5	6.5-8.5	IS:3025 (P-11)	
2	Color	Hazen	<5	5	15	IS:3025 (P-4)	
3	Odour		Agreeable	Agreeable	Agreeable	IS:3025 (P-5)	
4	Turbidity	NTU	<1	1	5	APHA 23rd Ed.	
5	Temperature	°C	24.8	-	-	IS:3025 (P-9)	
6	Total Dissolved Solids	mg/l	278	500	2000	IS:3025 (P-16	
7	Total Hardness as (CaCO <sub>3</sub> )	mg/l	152	200	600	IS:3025 (P-21	
8	Total Alkalinity as CaCO <sub>3</sub>	mg/l	140	200	600	IS:3025 (P-23	
9	Chlorides as Cl	mg/l	64	250	1000	IS:3025(P-32	
10	Sulphate as SO <sub>4</sub>	mg/l	31.20	200	400	APHA 23 <sup>rd</sup> Ed	
11	Nitrates as NO <sub>3</sub>	mg/l	0.16	45	No Relaxation	IS:3025 (P-34	
12	Calcium as Ca	mg/l	48	75	200	IS:3025 (P-40	
13	Magnesium as Mg	mg/l	7.77	30	100	APHA 23 <sup>rd</sup> Ed	
14	Fluoride as F	mg/l	ND	1.0	1.5	IS:3025 (P-60	
15	Iron (as Fe)	mg/l	0.16	0.3	No Relaxation	APHA 23rd Ed.	
16	Manganese as Mn	mg/l	ND	0.1	0.3	IS:3025 (P-59	
17	Total Chromium as Cr	mg/l	ND	0.05	No Relaxation	APHA 23rd Ed.	
18	Lead as Pb	mg/l	ND	0.01	No Relaxation	APHA 23 <sup>rd</sup> Ed.	
19	Zinc as Zn	mg/l	0.29	5	15	APHA 23rd Ed.	
20	Cadmium as Cd	mg/l	ND	0.003	No Relaxation	APHA 23 <sup>rd</sup> Ed.	
21	Copper as Cu	mg/l	ND	0.05	1.5	APHA 23rd Ed.	



M/s Talcher Fertilizers Limited

ULR No .:

TC148142400000550F

Post Vikrampur, Distt. Angul-759 106

Test Report Date:

10/12/2024

Odisha, India

### **Analysis Report**

Sr. No.	Parameters	Unit Test Results		Requirem	Protocol	
			GW1	1050		
	-			Desirable	Permissible	
22	Nickel as Ni	mg/l	ND [DL- 0.01]	0.02	No Relaxation	APHA 23rd Ed.
23	Arsenic as As	mg/l	ND [DL- 0.01]	0.01	0.05	APHA 23rd Ed.
24	Sodium as Na	mg/l	42.50	-	-	APHA 23 <sup>rd</sup> Ed.
25	Potassium as K	mg/l	3.98	-	-	APHA 23rd Ed.
26	Oil & Grease	mg/l	ND	-	-	IS:3025 (P-39)
27	Total Suspended Solids	mg/l	ND	-	-	IS:3025 (P-17)
28	Total Coliform*	MPN/100ml	Absent	Absent	Absent	IS 1622

(AUTHORISED SIGNATORY) (RHYTHEM BASSON\*)

Nitya Laboratories



Test Report No. :

Post Vikrampur, Distt. Angul-759 106

Test Report Date:

10/12/2024

202411280110

Odisha, India

Sample Particulars
Nature of the Sample

**Ground Water** 

Sample Quantity & Packaging

1 Liter, Pet Bottle

Sample Received at Lab

02/12/2024

Test Started on

: 02/12/2024

Test Completed

09/12/2024

Method of Sampling

: SOP/B/D-3

Date of Sampling

28/11/2024

Place of Sampling

GW1-Tentulei Village

Sr. No. Para	Parameters	Unit Test Results		Requirer	Protocol	
			GW1	IS:108		
				Desirable	Permissible	
1	Taste	-	Agreeable	Agreeable	Agreeable	IS:3025 (P-8)
2	Silica	mg/l	10.50	-	-	APHA 23 <sup>rd</sup> Ed
3	P Alkalinity as CaCO <sub>3</sub>	mg/l	BDL	-	-	IS:3025 (P-23)



ULR No .:

TC148142400000551F

Post Vikrampur, Distt. Angul-759 106 Odisha, India Test Report Date:

10/12/2024

Sample Particulars

Nature of the Sample Sample Quantity & Packaging Ground Water

1 Liter, Pet Bottle

Sample Received at Lab

02/12/2024

Test Started on
Test Completed
Method of Sampling

: 02/12/2024 : 09/12/2024 : SOP/B/D-3

Date of Sampling Place of Sampling : 28/11/2024 : GW2-Balanda Village

Analysis Pane

Sr. No.	Parameters	Unit	Test Results GW2	Requirem 1050	Protocol	
				Desirable	Permissible	
1	pH	<del>  -</del>	7.45	6.5-8.5	6.5-8.5	IS:3025 (P-11)
2	Color	Hazen	<5	5	15	IS:3025 (P-4)
3	Odour		Agreeable	Agreeable	Agreeable	IS:3025 (P-5)
4	Turbidity	NTU	<1	1	5	APHA 23 <sup>rd</sup> Ed
5	Temperature	°C	24.6	-	-	IS:3025 (P-9)
6	Total Dissolved Solids	mg/l	304	500	2000	IS:3025 (P-16)
7	Total Hardness as (CaCO <sub>3</sub> )	mg/l	148	200	600	IS:3025 (P-21
8	Total Alkalinity as CaCO <sub>3</sub>	mg/l	100	200	600	IS:3025 (P-23
9	Chlorides as CI	mg/l	70	250	1000	IS:3025(P-32
10	Sulphate as SO <sub>4</sub>	mg/l	39.00	200	400	APHA 23 <sup>rd</sup> Ed.
11	Nitrates as NO <sub>3</sub>	mg/l	0.26	45	No Relaxation	IS:3025 (P-34
12	Calcium as Ca	mg/l	50	75	200	IS:3025 (P-40
13	Magnesium as Mg	mg/l	5.58	30	100	APHA 23 <sup>rd</sup> Ed
14	Fluoride as F	mg/l	0.10	1.0	1.5	IS:3025 (P-60)
15	Iron (as Fe)	mg/l	0.12	0.3	No Relaxation	APHA 23 <sup>rd</sup> Ed.
16	Manganese as Mn	mg/l	ND [DL- 0.05]	0.1	0.3	IS:3025 (P-59)
17	Total Chromium as Cr	mg/l	ND [DL- 0.05]	0.05	No Relaxation	APHA 23 <sup>rd</sup> Ed.
18	Lead as Pb	mg/l	ND[DL- 0.005]	0.01	No Relaxation	APHA 23 <sup>rd</sup> Ed.
19	Zinc as Zn	mg/l	0.32	5	15	APHA 23 <sup>rd</sup> Ed.
20	Cadmium as Cd	mg/l	ND [DL- 0.001]	0.003	No Relaxation	APHA 23 <sup>rd</sup> Ed.
21	Copper as Cu	mg/l	ND [DL- 0.05]	0.05	1.5	APHA 23 <sup>rd</sup> Ed.



M/s Talcher Fertilizers Limited

ULR No .:

TC148142400000551F

Post Vikrampur, Distt. Angul-759 106 Odisha, India Test Report Date:

10/12/2024

Sr. No.	Parameters	Unit	Test Results	Requirem	Protocol	
			GW2	105		
				Desirable	Permissible	
22	Nickel as Ni	mg/l	ND [DL- 0.01]	0.02	No Relaxation	APHA 23 <sup>rd</sup> Ed.
23	Arsenic as As	mg/l	ND [DL- 0.01]	0.01	0.05	APHA 23 <sup>rd</sup> Ed.
24	Sodium as Na	mg/l	47.80	-	-	APHA 23 <sup>rd</sup> Ed.
25	Potassium as K	mg/l	4.09	-	-	APHA 23 <sup>rd</sup> Ed.
26	Oil & Grease	mg/l	ND		-	IS:3025 (P-39)
27	Total Suspended Solids	mg/l	ND	-	-	IS:3025 (P-17)
28	Total Coliform*	MPN/100ml	Absent	Absent	Absent	IS 1622





Test Report No. :

Post Vikrampur, Distt. Angul-759 106

Test Report Date:

202411280111 10/12/2024

Odisha, India

Sample Particulars

: Ground Water

Nature of the Sample Sample Quantity & Packaging

1 Liter, Pet Bottle

Sample Received at Lab

02/12/2024

Test Started on

02/12/2024

Test Completed

09/12/2024

Method of Sampling

: SOP/B/D-3

Date of Sampling

28/11/2024

Place of Sampling

GW2-Balanda Village

Sr. No. Parameters	Parameters	Unit Test Results		Requireme	Protocol		
			GW2		10500:2012		
				Desirable	Permissible		
1	Taste	-	Agreeable	Agreeable	Agreeable	IS:3025 (P-8)	
2	Silica	mg/l	12.40	-	-	APHA 23 <sup>rd</sup> Ed.	
3	P Alkalinity as CaCO <sub>3</sub>	mg/l	BDL	-	-	IS:3025 (P-23)	



ULR No .:

TC148142400000552F

Post Vikrampur, Distt. Angul-759 106 Odisha, India Test Report Date:

10/12/2024

Sample Particulars

Nature of the Sample

**Ground Water** 

Sample Quantity & Packaging

1 Liter, Pet Bottle

Sample Received at Lab

02/12/2024

Test Started on

02/12/2024

Test Completed

09/12/2024

Method of Sampling

: SOP/B/D-3

Date of Sampling

28/11/2024

Place of Sampling

GW3-Kukudang Village

Sr. No.	Parameters	Unit	Test Results		ent as per IS:	Protocol	
			GW3	1050	00:2012		
				Desirable	Permissible		
1	pH	-	7.68	6.5-8.5	6.5-8.5	IS:3025 (P-11	
2	Color	Hazen	<5	5	15	IS:3025 (P-4)	
3	Odour		Agreeable	Agreeable	Agreeable	IS:3025 (P-5)	
4	Turbidity	NTU	<1	1	5	APHA 23 <sup>rd</sup> Ed	
5	Temperature	°C	25.4		-	IS:3025 (P-9)	
6	Total Dissolved Solids	mg/l	318	500	2000	IS:3025 (P-16	
7	Total Hardness as (CaCO <sub>3</sub> )	mg/l	182	200	600	IS:3025 (P-21	
8	Total Alkalinity as CaCO <sub>3</sub>	mg/l	160	200	600	IS:3025 (P-23	
9	Chlorides as CI	mg/l	74	250	1000	IS:3025(P-32	
10	Sulphate as SO <sub>4</sub>	mg/l	40.50	200	400	APHA 23 <sup>rd</sup> Ed	
11	Nitrates as NO <sub>3</sub>	mg/l	0.50	45	No Relaxation	IS:3025 (P-34	
12	Calcium as Ca	mg/l	52	75	200	IS:3025 (P-40	
13	Magnesium as Mg	mg/l	12.63	30	100	APHA 23rd Ed	
14	Fluoride as F	mg/l	0.09	1.0	1.5	IS:3025 (P-60	
15	Iron (as Fe)	mg/l	0.26	0.3	No Relaxation	APHA 23 <sup>rd</sup> Ed	
16	Manganese as Mn	mg/l	ND [DL- 0.05]	0.1	0.3	IS:3025 (P-59	
17	Total Chromium as Cr	mg/l	ND [DL- 0.05]	0.05	No Relaxation	APHA 23 <sup>rd</sup> Ed	
18	Lead as Pb	mg/l	ND[DL- 0.005]	0.01	No Relaxation	APHA 23 <sup>rd</sup> Ed	
19	Zinc as Zn	mg/l	0.35	5	15	APHA 23 <sup>rd</sup> Ed	
20	Cadmium as Cd	mg/l	ND [DL- 0.001]	0.003	No Relaxation	APHA 23rd Ed	
21	Copper as Cu	mg/l	ND [DL- 0.05]	0.05	1.5	APHA 23 <sup>rd</sup> Ed	



M/s Talcher Fertilizers Limited

ULR No .:

TC148142400000552F

Post Vikrampur, Distt. Angul-759 106 Odisha, India Test Report Date:

10/12/2024

### **Analysis Report**

Sr. No.	Parameters	Unit	Test Results	Requirem	Protocol	
			GW3	105		
				Desirable	Permissible	
22	Nickel as Ni	mg/l	ND [DL- 0.01]	0.02	No Relaxation	APHA 23 <sup>rd</sup> Ed.
23	Arsenic as As	mg/l	ND [DL- 0.01]	0.01	0.05	APHA 23 <sup>rd</sup> Ed.
24	Sodium as Na	mg/l	49.20	-	-	APHA 23 <sup>rd</sup> Ed.
25	Potassium as K	mg/l	3.90	-	-	APHA 23 <sup>rd</sup> Ed.
26	Oil & Grease	mg/l	ND	-	-	IS:3025 (P-39)
27	Total Suspended Solids	mg/l	ND	-	-	IS:3025 (P-17)
28	Total Coliform*	MPN/100ml	Absent	Absent	Absent	IS 1622

(AUTHORISED SIGNATORY) (RHYTHEM BASSON\*)

Nitya Laboratories



Test Report No. :

Post Vikrampur, Distt. Angul-759 106

Test Report Date:

202411280112

Odisha, India

Sample Particulars
Nature of the Sample

**Ground Water** 

Sample Quantity & Packaging

1 Liter, Pet Bottle

Sample Received at Lab

02/12/2024

Test Started on

02/12/2024

**Test Completed** 

09/12/2024

Method of Sampling

SOP/B/D-3

Date of Sampling

28/11/2024

Place of Sampling

GW3-Kukudang Village

Sr. No. Parameters	Parameters	Unit	Test Results	Requireme	Protocol	
		GW3		10500:2012		
				Desirable	Permissible	
1	Taste	-	Agreeable	Agreeable	Agreeable	IS:3025 (P-8)
2	Silica	mg/l	11.50	-	-	APHA 23rd Ed
3	P Alkalinity as CaCO <sub>3</sub>	mg/l	BDL	-	-	IS:3025 (P-23

ULR No.:

TC148142400000553F

Post Vikrampur, Distt. Angul-759 106 Odisha, India

Test Report Date:

10/12/2024

Sample Particulars

Nature of the Sample

Surface Water

Sample Quantity & Packaging

1 Liter, Pet Bottle

Sample Received at Lab

: 02/12/2024

Test Started on **Test Completed**  : 02/12/2024

Method of Sampling

09/12/2024

Date of Sampling

: SOP/B/D-3 28/11/2024

Place of Sampling

SW1-Pump House

**Analysis Report** 

Sr. No.	Parameters	Unit	Test Results SW1		Permissi	ble Limits		Protocol
			OWI	A*	B*	C*	D*	
1	pH	-	7.36	5.5-9.0	5.5-9.0	5.5-9.0	5.5-9.0	IS:3025 (P-11)
2	Color	Hazen	<5	Note-1	Note-1	Note-1	Note-1	IS:3025 (P-4)
3	Turbidity	NTU	<1	-	-	-	-	APHA 23 <sup>rd</sup> Ed.
4	Temperature	°C	26.3	Note-5	-	-	Note-5	IS:3025 (P-9)
5	Total Dissolved Solids	mg/l	268	-	-	-	-	IS:3025 (P-16)
6	Total Hardness as (CaCO <sub>3</sub> )	mg/l	134	-	-	-	-	IS:3025 (P-21)
7	Total Alkalinity as CaCO <sub>3</sub>	mg/l	110	-	-	-	-	IS:3025 (P-23
8	Chlorides as Cl	mg/l	62	*	*	*	*	IS:3025(P-32
9	Sulphate as SO <sub>4</sub>	mg/l	26.40		*	*	*	APHA 23 <sup>rd</sup> Ed
10	Nitrates as NO <sub>3</sub>	mg/l	0.72	10	-	-	20	IS:3025 (P-34)
11	Calcium as Ca	mg/l	40	-	-	-	-	IS:3025 (P-40)
12	Magnesium as Mg	mg/l	8.26	-	-	-	-	APHA 23 <sup>rd</sup> Ed
13	Fluoride as F	mg/l	0.07	2.0	15	-	15	IS:3025 (P-60
14	Iron (as Fe)	mg/l	0.21	3.0	3.0	-	3.0	APHA 23 <sup>rd</sup> Ed.
15	Manganese as Mn	mg/l	ND [DL- 0.05]	2.0	2.0	-	2.0	IS:3025 (P-59)
16	Total Chromium as Cr	mg/l	ND [DL- 0.05]	2.0	2.0		2.0	APHA 23 <sup>rd</sup> Ed.
17	Lead as Pb	mg/l	ND[DL- 0.005]	0.1	1.0	-	2.0	APHA 23 <sup>rd</sup> Ed.
18	Zinc as Zn	mg/l	0.32	5.0	15	-	15	APHA 23 <sup>rd</sup> Ed.
19	Cadmium as Cd	mg/l	ND [DL- 0.001]	2.0	1.0	-	2.0	APHA 23 <sup>rd</sup> Ed.
20	Copper as Cu	mg/l	ND [DL- 0.05]	3.0	3.0	-	3.0	APHA 23 <sup>rd</sup> Ed.

Remark: ND-Not Detected, DL-Detection Limit, A\*- Inland Surface Water, B\*-Public Sewer, C\*-Land for Irrigation, D\*-Marine Coastal Areas



M/s Talcher Fertilizers Limited

ULR No .:

TC148142400000553F

Post Vikrampur, Distt. Angul-759 106 Odisha, India

Test Report Date:

10/12/2024

# **Analysis Report**

Sr. No.	Parameters	Unit	Test Results		Permissi	ble Limit	S	Protocol
			SW1					
				A*	B*	C*	D*	
21	Nickel as Ni	mg/l	ND [DL- 0.01]	3.0	3.0	-	5.0	APHA 23rd Ed.
22	Arsenic as As	mg/l	ND [DL- 0.01]	0.2	0.2	0.2	0.2	APHA 23rd Ed.
23	Sodium as Na	mg/l	32.50	-	-	-	-	APHA 23rd Ed.
24	Potassium as K	mg/l	3.09	-0	-		-	APHA 23rd Ed.
25	Oil & Grease	mg/l	ND	10	20	10	20	IS:3025 (P-39)
26	Total Suspended	mg/l	10	100	600	200	Note-2	IS:3025 (P-17)
27	Dissolved Oxygen as	mg/l	6.3		-	-	-	IS:3025 (P-38)
28	Biological Oxygen Demand as BOD	mg/l	4	30	350	100	100	IS:3025 (P-44)
29	Chemical Oxygen Demand as COD	mg/l	20	250	-	-	250	IS:3025 (P-58)
30	Total Coliform*	MPN/100ml	699	-	-	-	<b>—</b>	IS 1622

Remark:
ND-Not Detected, DL-Detection Limit, A\*- Inland Surface Water, B\*-Public Sewer, C\*-Land for Irrigation, D\*-Marine Coastal Areas

(AUTHOR SED SIGNATORY) (RHYTHEM BASSON\*)



ULR No .:

TC148142400000554F

Post Vikrampur, Distt. Angul-759 106 Odisha, India

Test Report Date:

10/12/2024

Sample Particulars

Nature of the Sample

Surface Water

Sample Quantity & Packaging

: 1 Liter, Pet Bottle

Sample Received at Lab

: 02/12/2024

Test Started on

: 02/12/2024

Test Completed

: 09/12/2024

Method of Sampling

: SOP/B/D-3

Date of Sampling

: 28/11/2024

Place of Sampling

: SW2-River Near Jatia Bridge

**Analysis Report** 

Sr. No.	Parameters	Unit	Test Results		Permissi	ble Limits		Protocol
			SW2					
				A*	B*	C*	D*	
1	pH	-	7.74	5.5-9.0	5.5-9.0	5.5-9.0	5.5-9.0	IS:3025 (P-11)
2	Color	Hazen	<5	Note-1	Note-1	Note-1	Note-1	IS:3025 (P-4)
3	Turbidity	NTU	<1	-	-	-	-	APHA 23 <sup>rd</sup> Ed
4	Temperature	°C	25.8	Note-5	-	-	Note-5	IS:3025 (P-9)
5	Total Dissolved Solids	mg/l	320	-	-	-	-	IS:3025 (P-16
6	Total Hardness as (CaCO <sub>3</sub> )	mg/l	164	-	-	-	-	IS:3025 (P-21
7	Total Alkalinity as CaCO <sub>3</sub>	mg/l	146	-	-	-	-	IS:3025 (P-23
8	Chlorides as Cl	mg/l	84	*	*	*		IS:3025(P-32
9	Sulphate as SO <sub>4</sub>	mg/l	40.20	*	*	*	*	APHA 23 <sup>rd</sup> Ed
10	Nitrates as NO <sub>3</sub>	mg/l	2.08	10	-	-	20	IS:3025 (P-34
11	Calcium as Ca	mg/l	56	-	-	-	-	IS:3025 (P-40
12	Magnesium as Mg	mg/l	5.83	-	-	-	-	APHA 23 <sup>rd</sup> Ed
13	Fluoride as F	mg/l	0.10	2.0	15	-	15	IS:3025 (P-60
14	Iron (as Fe)	mg/l	0.18	3.0	3.0	-	3.0	APHA 23rd Ed.
15	Manganese as Mn	mg/l	ND [DL- 0.05]	2.0	2.0	-	2.0	IS:3025 (P-59)
16	Total Chromium as Cr	mg/l	ND [DL- 0.05]	2.0	2.0	-	2.0	APHA 23rd Ed.
17	Lead as Pb	mg/l	ND[DL- 0.005]	0.1	1.0	-	2.0	APHA 23 <sup>rd</sup> Ed.
18	Zinc as Zn	mg/l	0.30	5.0	15	-	15	APHA 23 <sup>rd</sup> Ed.
19	Cadmium as Cd	mg/l	ND [DL- 0.001]	2.0	1.0	-	2.0	APHA 23rd Ed.
20	Copper as Cu	mg/l	ND [DL- 0.05]	3.0	3.0	-	3.0	APHA 23 <sup>rd</sup> Ed.

Remark

ND-Not Detected, DL-Detection Limit, A\*- Inland Surface Water, B\*-Public Sewer, C\*-Land for Irrigation, D\*-Marine Coastal Areas



M/s Talcher Fertilizers Limited

ULR No.:

TC148142400000554F

Post Vikrampur, Distt. Angul-759 106 Odisha, India

Test Report Date:

10/12/2024

# **Analysis Report**

Sr. No.	Parameters	Parameters Unit Test Res			S	Protocol		
			SW2					
				A*	B*	C*	D*	
21	Nickel as Ni	mg/l	ND [DL- 0.01]	3.0	3.0	-	5.0	APHA 23 <sup>rd</sup> Ed
22	Arsenic as As	mg/l	ND [DL- 0.01]	0.2	0.2	0.2	0.2	APHA 23 <sup>rd</sup> Ed
23	Sodium as Na	mg/l	29.40		-		-	APHA 23 <sup>rd</sup> Ed
24	Potassium as K	mg/l	2.10		-		-	APHA 23 <sup>rd</sup> Ed
25	Oil & Grease	mg/l	ND	10	20	10	20	IS:3025 (P-39
26	Total Suspended Solids	mg/l	13	100	600	200	Note-2	IS:3025 (P-17
27	Dissolved Oxygen as DO	mg/l	6.1	-	-	-	-	IS:3025 (P-38
28	Biological Oxygen Demand as BOD	mg/l	5	30	350	100	100	IS:3025 (P-44
29	Chemical Oxygen Demand as COD	mg/l	26	250	-	-	250	IS:3025 (P-58
30	Total Coliform*	MPN/100ml	1005	_	-	-	-	IS 1622

Remark

ND-Not Detected, DL-Detection Limit, A\*- Inland Surface Water, B\*-Public Sewer, C\*-Land for Irrigation, D\*-Marine Coastal Areas

(AUTHORISED SIGNATORY) (RHYTHEM BASSON\*)



ULR No.:

TC148142400000555F

Post Vikrampur, Distt. Angul-759 106

Test Report Date:

10/12/2024

Sample Particulars

Nature of the Sample Sample Quantity & Packaging

Odisha, India

: Surface Water : 1 Liter, Pet Bottle

Sample Received at Lab Test Started on : 02/12/2024 : 02/12/2024 : 09/12/2024 : SOP/B/D-3

Method of Sampling Date of Sampling

Test Completed

28/11/2024

Place of Sampling

SW3-River Near PTBS Thermal Area

**Analysis Report** 

Sr. No.	Parameters	Unit	Test Results		Permissil	ble Limits		Protocol
			SW3					
				A*	B*	C*	D*	
1	pH	-	7.55	5.5-9.0	5.5-9.0	5.5-9.0	5.5-9.0	IS:3025 (P-11)
2	Color	Hazen	<5	Note-1	Note-1	Note-1	Note-1	IS:3025 (P-4)
3	Turbidity	NTU	<1	-	-	-	-	APHA 23 <sup>rd</sup> Ed
4	Temperature	°C	25.5	Note-5	-	-	Note-5	IS:3025 (P-9)
5	Total Dissolved Solids	mg/l	250	-	-	-	-	IS:3025 (P-16
6	Total Hardness as (CaCO <sub>3</sub> )	mg/l	134	-	-	-	-	IS:3025 (P-21
7	Total Alkalinity as CaCO <sub>3</sub>	mg/l	110	-	-	-	-	IS:3025 (P-23
8	Chlorides as Cl	mg/l	66	*	*	*	*	IS:3025(P-32
9	Sulphate as SO <sub>4</sub>	mg/l	31.40	*	*	*	*	APHA 23 <sup>rd</sup> Ed
10	Nitrates as NO <sub>3</sub>	mg/l	1.20	10	-		20	IS:3025 (P-34
11	Calcium as Ca	mg/l	34		-	-	-	IS:3025 (P-40
12	Magnesium as Mg	mg/l	11.90	-	-	-	-	APHA 23 <sup>rd</sup> Ed
13	Fluoride as F	mg/l	0.12	2.0	15	-	15	IS:3025 (P-60
14	Iron (as Fe)	mg/l	0.22	3.0	3.0	-	3.0	APHA 23 <sup>rd</sup> Ed
15	Manganese as Mn	mg/l	ND [DL- 0.05]	2.0	2.0	-	2.0	IS:3025 (P-59
16	Total Chromium as Cr	mg/l	ND [DL- 0.05]	2.0	2.0	-	2.0	APHA 23 <sup>rd</sup> Ed
17	Lead as Pb	mg/l	ND [DL- 0.005]	0.1	1.0	-	2.0	APHA 23 <sup>rd</sup> Ed
18	Zinc as Zn	mg/l	0.31	5.0	15	-	15	APHA 23rd Ed.
19	Cadmium as Cd	mg/l	ND [DL- 0.001]	2.0	1.0	-	2.0	APHA 23 <sup>rd</sup> Ed.
20	Copper as Cu	mg/l	ND [DL- 0.05]	3.0	3.0	-	3.0	APHA 23 <sup>rd</sup> Ed.

Remark

ND-Not Detected, DL-Detection Limit, A\*- Inland Surface Water, B\*-Public Sewer, C\*-Land for Imagation, D\*-Marine Coastal Areas



M/s Talcher Fertilizers Limited

ULR No .:

TC148142400000555F

Post Vikrampur, Distt. Angul-759 106 Odisha, India Test Report Date:

10/12/2024

**Analysis Report** 

Sr. No.	Parameters	Unit	Test Results		Permissi	9	Protocol	
140.			SW3					
				A*	B*	C*	D*	1
21	Nickel as Ni	mg/l	ND [DL- 0.01]	3.0	3.0	-	5.0	APHA 23 <sup>rd</sup> Ed.
22	Arsenic as As	mg/l	ND [DL- 0.01]	0.2	0.2	0.2	0.2	APHA 23 <sup>rd</sup> Ed.
23	Sodium as Na	mg/l	36.20	-	-	-	-	APHA 23 <sup>rd</sup> Ed.
24	Potassium as K	mg/l	3.40		-		-	APHA 23 <sup>rd</sup> Ed.
25	Oil & Grease	mg/l	ND	10	20	10	20	IS:3025 (P-39)
26	Total Suspended	mg/l	11	100	600	200	Note-2	IS:3025 (P-17)
27	Dissolved Oxygen as	mg/l	6.0	-	-	-	-	IS:3025 (P-38)
28	Biological Oxygen Demand as BOD	mg/l	4	30	350	100	100	IS:3025 (P-44)
29	Chemical Oxygen Demand as COD	mg/l	20	250	-	-	250	IS:3025 (P-58)
30	Total Coliform*	MPN/100ml	366	_	-	-	-	IS 1622

Remark

ND-Not Detected, DL-Detection Limit, A\*- Inland Surface Water, B\*-Public Sewer, C\*-Land for Irrigation, D\*-Marine Coastal Areas

(AUTHORISED SIGNATORY) (RHYTHEM BASSON\*)





Odisha, India

ULR No .:

TC148142400001141F

Post Vikrampur, Distt. Angul-759 106

Test Report Date:

03/01/2025

Sample Particulars

Nature of the Sample

**Ground Water** 

Sample Quantity & Packaging

: 1 Liter, Pet Bottle

Sample Received at Lab

: 27/12/2024

Test Started on

**Test Completed** 

: 27/12/2024

02/01/2025 : SOP/B/D-3

Method of Sampling

: 24/12/2024

Date of Sampling Place of Sampling

: GW1-Tentulei Village

Sr. No.	Parameters	Unit	Test Results GW1		ent as per IS: 00:2012	Protocol
			GW1	Desirable	Permissible	-
1	pH	-	7.56	6.5-8.5	6.5-8.5	IS:3025 (P-11
2	Color	Hazen	<5	5	15	IS:3025 (P-4)
3	Odour		Agreeable	Agreeable	Agreeable	IS:3025 (P-5)
4	Turbidity	NTU	<1	1	5	APHA 23 <sup>rd</sup> Ed
5	Temperature	°C	25.4	_	-	IS:3025 (P-9)
6	Total Dissolved Solids	mg/l	310	500	2000	IS:3025 (P-16
7	Total Hardness as (CaCO <sub>3</sub> )	mg/l	164	200	600	IS:3025 (P-21
8	Total Alkalinity as CaCO <sub>3</sub>	mg/l	150	200	600	IS:3025 (P-23
9	Chlorides as CI	mg/l	70	250	1000	IS:3025(P-32
10	Sulphate as SO <sub>4</sub>	mg/l	39.20	200	400	APHA 23rd Ed
11	Nitrates as NO <sub>3</sub>	mg/l	0.19	45	No Relaxation	IS:3025 (P-34
12	Calcium as Ca	mg/i	50	75	200	IS:3025 (P-40
13	Magnesium as Mg	mg/l	9.47	30	100	APHA 23 <sup>rd</sup> Ed
14	Fluoride as F	mg/l	ND	1.0	1.5	IS:3025 (P-60
15	Iron (as Fe)	mg/l	0.23	0.3	No Relaxation	APHA 23 <sup>rd</sup> Ed
16	Manganese as Mn	mg/l	ND	0.1	0.3	IS:3025 (P-59
17	Total Chromium as Cr	mg/l	ND	0.05	No Relaxation	APHA 23 <sup>rd</sup> Ed.
18	Lead as Pb	mg/l	ND	0.01	No Relaxation	APHA 23 <sup>rd</sup> Ed.
19	Zinc as Zn	mg/l	0.35	5	15	APHA 23 <sup>rd</sup> Ed.
20	Cadmium as Cd	mg/l	ND	0.003	No Relaxation	APHA 23 <sup>rd</sup> Ed.
21	Copper as Cu	mg/l	ND	0.05	1.5	APHA 23rd Ed.



ULR No .:

TC148142400001141F

Post Vikrampur, Distt. Angul-759 106

Test Report Date:

03/01/2025

Odisha, India

# **Analysis Report**

Sr. No.	Parameters	Unit	Test Results		ent as per IS:	Protocol
			GW1	105		
				Desirable	Permissible	
22	Nickel as Ni	mg/l	ND [DL- 0.01]	0.02	No Relaxation	APHA 23 <sup>rd</sup> Ed.
23	Arsenic as As	mg/l	ND [DL- 0.01]	0.01	0.05	APHA 23 <sup>rd</sup> Ed.
24	Sodium as Na	mg/l	38.60	-	-	APHA 23 <sup>rd</sup> Ed.
25	Potassium as K	mg/l	3.76	-	-	APHA 23 <sup>rd</sup> Ed.
26	Oil & Grease	mg/l	ND		-	IS:3025 (P-39)
27	Total Suspended Solids	mg/l	ND		-	IS:3025 (P-17)
28	Total Coliform*	MPN/100ml	Absent	Absent	Absent	IS 1622

(AUTHORISED SIGNATORY) (RHYTHEM BASSON\*)

Nitya Laboratories



Test Report No. :

Post Vikrampur, Distt. Angul-759 106

Test Report Date:

202412240110 03/01/2025

Odisha, India

Sample Particulars

: Ground Water

Nature of the Sample Sample Quantity & Packaging

: 1 Liter, Pet Bottle

Sample Received at Lab

: 27/12/2024

Test Started on

: 27/12/2024

Test Completed

: 02/01/2025

Made and a Committee

OZ/O IIZOZO

Method of Sampling

: SOP/B/D-3

Date of Sampling

: 24/12/2024

Place of Sampling

GW1-Tentulei Village

Sr. No.	Parameters	Unit	Test Results	Requirer	Protocol	
			GW1	IS:105		
				Desirable	Permissible	
1	Taste	-	Agreeable	Agreeable	Agreeable	IS:3025 (P-8)
2	Silica	mg/l	12.80	-	-	APHA 23 <sup>rd</sup> Ed
3	P Alkalinity as CaCO <sub>3</sub>	mg/l	BDL	-	-	IS:3025 (P-23)



ULR No.:

TC148142400001142F

Post Vikrampur, Distt. Angul-759 106 Odisha, India Test Report Date:

03/01/2025

Sample Particulars

Nature of the Sample

**Ground Water** 

Sample Quantity & Packaging

1 Liter, Pet Bottle

Sample Received at Lab

27/12/2024

Test Started on

27/12/2024

Test Completed

02/01/2025

Method of Sampling

SOP/B/D-3

Date of Sampling

24/12/2024

Place of Sampling

GW2-Balanda Village

Sr. No.	Parameters	Unit	Test Results	7.50	ent as per IS: 00:2012	Protocol	
			GW2	Desirable	T B 1 W1	4	
				Destrable	Permissible		
1	pH	-	7.66	6.5-8.5	6.5-8.5	IS:3025 (P-11	
2	Color	Hazen	<5	5	15	IS:3025 (P-4)	
3	Odour		Agreeable	Agreeable	Agreeable	IS:3025 (P-5)	
4	Turbidity	NTU	<1	1	5	APHA 23 <sup>rd</sup> Ed	
5	Temperature	°C	25.2	-	-	IS:3025 (P-9)	
6	Total Dissolved Solids	mg/l	330	500	2000	IS:3025 (P-16	
7	Total Hardness as (CaCO <sub>3</sub> )	mg/l	158	200	600	IS:3025 (P-21	
8	Total Alkalinity as CaCO <sub>3</sub>	mg/l	114	200	600	IS:3025 (P-23	
9	Chlorides as CI	mg/l	80	250	1000	IS:3025(P-32	
10	Sulphate as SO <sub>4</sub>	mg/l	41.20	200	400	APHA 23 <sup>rd</sup> Ed	
11	Nitrates as NO <sub>3</sub>	mg/l	0.32	45	No Relaxation	IS:3025 (P-34	
12	Calcium as Ca	mg/l	56	75	200	IS:3025 (P-40	
13	Magnesium as Mg	mg/l	4.37	30	100	APHA 23 <sup>rd</sup> Ed	
14	Fluoride as F	mg/l	0.08	1.0	1.5	IS:3025 (P-60	
15	Iron (as Fe)	mg/l	0.16	0.3	No Relaxation	APHA 23rd Ed	
16	Manganese as Mn	mg/l	ND [DL- 0.05]	0.1	0.3	IS:3025 (P-59	
17	Total Chromium as Cr	mg/l	ND [DL- 0.05]	0.05	No Relaxation	APHA 23 <sup>rd</sup> Ed	
18	Lead as Pb	mg/l	ND[DL- 0.005]	0.01	No Relaxation	APHA 23 <sup>rd</sup> Ed	
19	Zinc as Zn	mg/l	0.45	5	15	APHA 23 <sup>rd</sup> Ed	
20	Cadmium as Cd	mg/l	ND [DL- 0.001]	0.003	No Relaxation	APHA 23 <sup>rd</sup> Ed	
21	Copper as Cu	mg/l	ND [DL- 0.05]	0.05	1.5	APHA 23 <sup>rd</sup> Ed	



M/s Talcher Fertilizers Limited

ULR No.:

TC148142400001142F

Post Vikrampur, Distt. Angul-759 106 Odisha, India

Test Report Date:

03/01/2025

# **Analysis Report**

Sr. No.	Parameters	Unit Test Results		Requirem	Protocol	
			GW2	105		
				Desirable	Permissible	
22	Nickel as Ni	mg/l	ND [DL- 0.01]	0.02	No Relaxation	APHA 23 <sup>rd</sup> Ed.
23	Arsenic as As	mg/I	ND [DL- 0.01]	0.01	0.05	APHA 23 <sup>rd</sup> Ed.
24	Sodium as Na	mg/l	42.50		-	APHA 23 <sup>rd</sup> Ed.
25	Potassium as K	mg/l	4.25	-	-	APHA 23 <sup>rd</sup> Ed.
26	Oil & Grease	mg/l	ND	-	-	IS:3025 (P-39)
27	Total Suspended Solids	mg/l	ND		-	IS:3025 (P-17)
28	Total Coliform*	MPN/100ml	Absent	Absent	Absent	IS 1622

(AUTHORISED SIGNATORY) (RH) THEM BASSON\*)



Test Report No. :

Post Vikrampur, Distt. Angul-759 106

Test Report Date:

202412240111 03/01/2025

Odisha, India

Sample Particulars Nature of the Sample

**Ground Water** 

Sample Quantity & Packaging

1 Liter, Pet Bottle

Sample Received at Lab

27/12/2024

Test Started on

27/12/2024

**Test Completed** 

Method of Sampling

02/01/2025

: SOP/B/D-3

Date of Sampling

24/12/2024

Place of Sampling

GW2-Balanda Village

Sr. No.	Parameters	Tost Nesalts		Requireme 1050	Protocol	
			GW2	1000		
				Desirable	Permissible	
1	Taste	-	Agreeable	Agreeable	Agreeable	IS:3025 (P-8)
2	Silica	mg/l	10.80	-	-	APHA 23 <sup>rd</sup> Ed.
3	P Alkalinity as CaCO <sub>3</sub>	mg/l	BDL	-	-	IS:3025 (P-23)

M/s Talcher Fertilizers Limited

ULR No.:

TC148142400001143F

Post Vikrampur, Distt. Angul-759 106 Odisha, India Test Report Date:

03/01/2025

Sample Particulars

Nature of the Sample

**Ground Water** 

Sample Quantity & Packaging

1 Liter, Pet Bottle

Sample Received at Lab

: 27/12/2024

Test Started on

: 27/12/2024

Test Completed

02/01/2025

Method of Sampling

: SOP/B/D-3

Date of Sampling

: 24/12/2024

Place of Sampling

GW3-Kukudang Village

Sr. No.	Parameters	Unit	Test Results GW3		ent as per IS: 00:2012	Protocol
				Desirable	Permissible	
1	pH	-	7.84	6.5-8.5	6.5-8.5	IS:3025 (P-11
2	Color	Hazen	<5	5	15	IS:3025 (P-4)
3	Odour		Agreeable	Agreeable	Agreeable	IS:3025 (P-5)
4	Turbidity	NTU	<1	1	5	APHA 23 <sup>rd</sup> Ed
5	Temperature	°C	25.8	-	-	IS:3025 (P-9)
6	Total Dissolved Solids	mg/l	298	500	2000	IS:3025 (P-16
7	Total Hardness as (CaCO <sub>3</sub> )	mg/l	162	200	600	IS:3025 (P-21
8	Total Alkalinity as CaCO <sub>3</sub>	mg/l	140	200	600	IS:3025 (P-23
9	Chlorides as CI	mg/l	64	250	1000	IS:3025(P-32
10	Sulphate as SO <sub>4</sub>	mg/l	30.20	200	400	APHA 23 <sup>rd</sup> Ed
11	Nitrates as NO <sub>3</sub>	mg/l	0.28	45	No Relaxation	IS:3025 (P-34
12	Calcium as Ca	mg/l	46	75	200	IS:3025 (P-40
13	Magnesium as Mg	mg/l	11.42	30	100	APHA 23 <sup>rd</sup> Ed
14	Fluoride as F	mg/l	0.13	1.0	1.5	IS:3025 (P-60
15	Iron (as Fe)	mg/l	0.18	0.3	No Relaxation	APHA 23rd Ed
16	Manganese as Mn	mg/l	ND [DL- 0.05]	0.1	0.3	IS:3025 (P-59
17	Total Chromium as Cr	mg/l	ND [DL- 0.05]	0.05	No Relaxation	APHA 23rd Ed.
18	Lead as Pb	mg/l	ND[DL- 0.005]	0.01	No Relaxation	APHA 23 <sup>rd</sup> Ed.
19	Zinc as Zn	mg/l	0.28	5	15	APHA 23rd Ed.
20	Cadmium as Cd	mg/l	ND [DL- 0.001]	0.003	No Relaxation	APHA 23rd Ed.
21	Copper as Cu	mg/l	ND [DL- 0.05]	0.05	1.5	APHA 23rd Ed.



Issued To

M/s Talcher Fertilizers Limited

ULR No.:

TC148142400001143F

Post Vikrampur, Distt. Angul-759 106 Odisha, India Test Report Date:

03/01/2025

Analysis Report

Sr. No. Parameters		Unit Test Results		Requirem	Protocol	
			GW3	105		
				Desirable	Permissible	
22	Nickel as Ni	mg/l	ND [DL- 0.01]	0.02	No Relaxation	APHA 23rd Ed.
23	Arsenic as As	mg/l	ND [DL- 0.01]	0.01	0.05	APHA 23 <sup>rd</sup> Ed.
24	Sodium as Na	mg/l	45.50		-	APHA 23 <sup>rd</sup> Ed.
25	Potassium as K	mg/l	4.20	-	-	APHA 23 <sup>rd</sup> Ed.
26	Oil & Grease	mg/l	ND	-	-	IS:3025 (P-39)
27	Total Suspended Solids	mg/l	ND	-	7	IS:3025 (P-17)
28	Total Coliform*	MPN/100ml	Absent	Absent	Absent	IS 1622

(AUTHORISED SIGNATORY) (RHYTHEM BASSON\*)

Nitya Laboratories



Test Report No. :

Post Vikrampur, Distt. Angul-759 106 Odisha, India

Test Report Date:

202412240112 03/01/2025

Sample Particulars

Nature of the Sample

**Ground Water** 

Sample Quantity & Packaging

1 Liter, Pet Bottle

Sample Received at Lab

27/12/2024

Test Started on

21/12/2027

Test Completed

27/12/2024

Mathad of Committee

02/01/2025

Method of Sampling

SOP/B/D-3

Date of Sampling

24/12/2024

Place of Sampling

GW3-Kukudang Village

Sr. No.	Parameters	Unit	Test Results GW3	Requirement as per IS: 10500:2012		Protocol
				Desirable	Permissible	
1	Taste	-	Agreeable	Agreeable	Agreeable	IS:3025 (P-8)
2	Silica	mg/l	13.40	-	-	APHA 23 <sup>rd</sup> Ed
3	P Alkalinity as CaCO <sub>3</sub>	mg/l	BDL	-	-	IS:3025 (P-23



ULR No.:

TC148142400001144F

Post Vikrampur, Distt. Angul-759 106 Odisha, India

Test Report Date:

03/01/2025

Sample Particulars

Nature of the Sample

Surface Water

Sample Quantity & Packaging

1 Liter, Pet Bottle

Sample Received at Lab

27/12/2024

Test Started on

27/12/2024

**Test Completed** 

02/01/2025

Method of Sampling

: SOP/B/D-3

Date of Sampling

24/12/2024

Place of Sampling

SW1-Pump House

**Analysis Report** 

Sr. No.	Parameters	Unit	Test Results SW1		Permissi	ble Limits	8	Protocol
				A*	B*	C*	D*	
1	pH	-	7.58	5.5-9.0	5.5-9.0	5.5-9.0	5.5-9.0	IS:3025 (P-11
2	Color	Hazen	<5	Note-1	Note-1	Note-1	Note-1	IS:3025 (P-4)
3	Turbidity	NTU	<1	-	-	-	-	APHA 23 <sup>rd</sup> Ed
4	Temperature	°C	25.90	Note-5	-	-	Note-5	IS:3025 (P-9)
5	Total Dissolved Solids	mg/l	308	-	-	-	-	IS:3025 (P-16
6	Total Hardness as (CaCO <sub>3</sub> )	mg/l	146	-	-	-	-	IS:3025 (P-21
7	Total Alkalinity as CaCO <sub>3</sub>	mg/l	120	-	-	-	-	IS:3025 (P-23
8	Chlorides as CI	mg/l	54		*	*	*	IS:3025(P-32
9	Sulphate as SO <sub>4</sub>	mg/l	29.50	*	4		*	APHA 23 <sup>rd</sup> Ed
10	Nitrates as NO <sub>3</sub>	mg/l	0.65	10	-	-	20	IS:3025 (P-34
11	Calcium as Ca	mg/l	36	-	-	-	-	IS:3025 (P-40
12	Magnesium as Mg	mg/l	13.60	-	-	-	-	APHA 23 <sup>rd</sup> Ed
13	Fluoride as F	mg/l	0.10	2.0	15	-	15	IS:3025 (P-60
14	Iron (as Fe)	mg/l	0.26	3.0	3.0	-	3.0	APHA 23 <sup>rd</sup> Ed
15	Manganese as Mn	mg/l	ND [DL- 0.05]	2.0	2.0	_	2.0	IS:3025 (P-59
16	Total Chromium as Cr	mg/l	ND [DL- 0.05]	2.0	2.0	-	2.0	APHA 23rd Ed
17	Lead as Pb	mg/l	ND[DL- 0.005]	0.1	1.0	-	2.0	APHA 23 <sup>rd</sup> Ed
18	Zinc as Zn	mg/l	0.40	5.0	15	-	15	APHA 23 <sup>rd</sup> Ed
19	Cadmium as Cd	mg/l	ND [DL- 0.001]	2.0	1.0	-	2.0	APHA 23 <sup>rd</sup> Ed.
20	Copper as Cu	mg/l	ND [DL- 0.05]	3.0	3.0	_	3.0	APHA 23 <sup>rd</sup> Ed.



ULR No .:

TC148142400001144F

Post Vikrampur, Distt. Angul-759 106 Odisha, India

Test Report Date:

03/01/2025

**Analysis Report** 

Sr.	Parameters	Unit	Test Results		Permissi	ble Limit	S	Protocol
No.			SW1					
				A*	B*	C*	D*	
21	Nickel as Ni	mg/l	ND [DL- 0.01]	3.0	3.0	-	5.0	APHA 23rd Ed.
22	Arsenic as As	mg/l	ND [DL- 0.01]	0.2	0.2	0.2	0.2	APHA 23 <sup>rd</sup> Ed.
23	Sodium as Na	mg/l	34.20	-	- 1	-	-	APHA 23rd Ed.
24	Potassium as K	mg/l	3.40	-	-	-	-	APHA 23rd Ed.
25	Oil & Grease	mg/l	ND	10	20	10	20	IS:3025 (P-39)
26	Total Suspended	mg/l	12	100	600	200	Note-2	IS:3025 (P-17)
27	Dissolved Oxygen as	mg/l	5.90	-	-	-	-	IS:3025 (P-38)
28	Biological Oxygen Demand as BOD	mg/l	5	30	350	100	100	IS:3025 (P-44)
29	Chemical Oxygen Demand as COD	mg/l	24	250	-	-	250	IS:3025 (P-58)
30	Total Coliform*	MPN/100ml	500	-	-	-	-	IS 1622





Issued To

M/s Talcher Fertilizers Limited

ULR No .:

TC148142400001145F

Post Vikrampur, Distt. Angul-759 106 Odisha, India

Test Report Date:

03/01/2025

Sample Particulars

Nature of the Sample

Surface Water

Sample Quantity & Packaging

1 Liter, Pet Bottle

Sample Received at Lab

27/12/2024

Test Started on

27/12/2024

**Test Completed** 

02/01/2025

Method of Sampling

SOP/B/D-3

Date of Sampling

24/12/2024

Place of Sampling

SW2-River Near Jatia Bridge

**Analysis Report** 

Sr. No.	Parameters	Unit	Test Results		Permissil	ble Limits		Protocol
			SW2					
				A*	B*	C*	D*	
1	pH	-	7.78	5.5-9.0	5.5-9.0	5.5-9.0	5.5-9.0	IS:3025 (P-11)
2	Color	Hazen	<5	Note-1	Note-1	Note-1	Note-1	IS:3025 (P-4)
3	Turbidity	NTU	<1	-	-	-	-	APHA 23rd Ed
4	Temperature	°C	24.9	Note-5	-	-	Note-5	IS:3025 (P-9)
5	Total Dissolved Solids	mg/l	312	-	-	-	-	IS:3025 (P-16
6	Total Hardness as (CaCO <sub>3</sub> )	mg/l	172	-	-	-	-	IS:3025 (P-21
7	Total Alkalinity as CaCO <sub>3</sub>	mg/l	154	-	-	-	-	IS:3025 (P-23
8	Chlorides as CI	mg/l	78			*		IS:3025(P-32
9	Sulphate as SO <sub>4</sub>	mg/l	35.50	*				APHA 23 <sup>rd</sup> Ed
10	Nitrates as NO <sub>3</sub>	mg/l	1.20	10	-	-	20	IS:3025 (P-34
11	Calcium as Ca	mg/l	50	-	-	-	-	IS:3025 (P-40
12	Magnesium as Mg	mg/l	11.42	-	-	-	-	APHA 23 <sup>rd</sup> Ed
13	Fluoride as F	mg/l	0.09	2.0	15	-	15	IS:3025 (P-60
14	Iron (as Fe)	mg/l	0.24	3.0	3.0	-	3.0	APHA 23 <sup>rd</sup> Ed
15	Manganese as Mn	mg/l	ND [DL- 0.05]	2.0	2.0	-	2.0	IS:3025 (P-59
16	Total Chromium as Cr	mg/l	ND [DL- 0.05]	2.0	2.0	-	2.0	APHA 23 <sup>rd</sup> Ed
17	Lead as Pb	mg/l	ND [DL- 0.005]	0.1	1.0	-	2.0	APHA 23 <sup>rd</sup> Ed
18	Zinc as Zn	mg/l	0.46	5.0	15	-	15	APHA 23rd Ed.
19	Cadmium as Cd	mg/l	ND [DL- 0.001]	2.0	1.0	-	2.0	APHA 23rd Ed.
20	Copper as Cu	mg/l	ND [DL- 0.05]	3.0	3.0		3.0	APHA 23rd Ed.



ULR No .:

TC148142400001145F

Post Vikrampur, Distt. Angul-759 106 Odisha, India

Test Report Date:

03/01/2025

# **Analysis Report**

Sr. No.	Parameters	Unit	Test Results		Permissi	S	Protocol	
			SW2					
				A*	B*	C*	D*	
21	Nickel as Ni	mg/l	ND [DL- 0.01]	3.0	3.0	-	5.0	APHA 23 <sup>rd</sup> Ed.
22	Arsenic as As	mg/l	ND [DL- 0.01]	0.2	0.2	0.2	0.2	APHA 23rd Ed.
23	Sodium as Na	mg/l	32.60	-	-	-	-	APHA 23 <sup>rd</sup> Ed.
24	Potassium as K	mg/l	3.30	-	-		-	APHA 23rd Ed.
25	Oil & Grease	mg/l	ND	10	20	10	20	IS:3025 (P-39
26	Total Suspended Solids	mg/l	16	100	600	200	Note-2	IS:3025 (P-17
27	Dissolved Oxygen as DO	mg/l	6.3	-	-	-	-	IS:3025 (P-38
28	Biological Oxygen Demand as BOD	mg/l	4	30	350	100	100	IS:3025 (P-44
29	Chemical Oxygen Demand as COD	mg/l	20	250		-	250	IS:3025 (P-58
30	Total Coliform*	MPN/100ml	999	-	-	-	-	IS 1622

Remark: ND-Not Detected, DL-Detection Limit, A\*- Inland Surface Water, B\*-Public Sewer, C\*-Land for Irrigation, D\*-Marine Coastal Areas

(AUTHORISED SIGNATORY) (RHYTHEM BASSON\*)



ULR No.:

TC148142400001146F

Post Vikrampur, Distt. Angul-759 106 Odisha, India

Test Report Date:

03/01/2025

Sample Particulars

Nature of the Sample

Surface Water

Sample Quantity & Packaging

1 Liter, Pet Bottle

Sample Received at Lab

27/12/2024

Test Started on

27/12/2024

**Test Completed** 

02/01/2025

Method of Sampling

: SOP/B/D-3

Date of Sampling

24/12/2024

Place of Sampling

SW3-River Near PTBS Thermal Area

**Analysis Report** 

Sr. No.	Parameters	Unit	Test Results		Permissi	ble Limits		Protocol
			SW3					
				A*	B*	C*	D*	
1	pH	-	7.67	5.5-9.0	5.5-9.0	5.5-9.0	5.5-9.0	IS:3025 (P-11)
2	Color	Hazen	<5	Note-1	Note-1	Note-1	Note-1	IS:3025 (P-4)
3	Turbidity	NTU	<1	-	-	-		APHA 23rd Ed.
4	Temperature	°C	25.4	Note-5	-	-	Note-5	IS:3025 (P-9)
5	Total Dissolved Solids	mg/l	288	-	-	-	-	IS:3025 (P-16)
6	Total Hardness as (CaCO <sub>3</sub> )	mg/l	146	-	-	-	-	IS:3025 (P-21)
7	Total Alkalinity as CaCO <sub>3</sub>	mg/l	120	-	-	-	-	IS:3025 (P-23)
8	Chlorides as Cl	mg/l	60	*	*	*	*	IS:3025(P-32
9	Sulphate as SO <sub>4</sub>	mg/l	36.20	*	*	*	*	APHA 23rd Ed.
10	Nitrates as NO <sub>3</sub>	mg/l	0.98	10	-	-	20	IS:3025 (P-34)
11	Calcium as Ca	mg/l	30	-	-	-	-	IS:3025 (P-40)
12	Magnesium as Mg	mg/l	17.25	-	-	-	-	APHA 23rd Ed.
13	Fluoride as F	mg/l	0.16	2.0	15	-	15	IS:3025 (P-60)
14	Iron (as Fe)	mg/l	0.28	3.0	3.0	-	3.0	APHA 23rd Ed.
15	Manganese as Mn	mg/l	ND [DL- 0.05]	2.0	2.0	-	2.0	IS:3025 (P-59)
16	Total Chromium as Cr	mg/l	ND [DL- 0.05]	2.0	2.0	-	2.0	APHA 23 <sup>rd</sup> Ed.
17	Lead as Pb	mg/l	ND [DL- 0.005]	0.1	1.0	-	2.0	APHA 23 <sup>rd</sup> Ed.
18	Zinc as Zn	mg/l	0.43	5.0	15	-	15	APHA 23 <sup>rd</sup> Ed.
19	Cadmium as Cd	mg/l	ND [DL- 0.001]	2.0	1.0	-	2.0	APHA 23 <sup>rd</sup> Ed.
20	Copper as Cu	mg/l	ND [DL- 0.05]	3.0	3.0	-	3.0	APHA 23 <sup>rd</sup> Ed.



Issued To

M/s Talcher Fertilizers Limited

ULR No.:

TC148142400001146F

Post Vikrampur, Distt. Angul-759 106 Odisha, India

Test Report Date:

03/01/2025

**Analysis Report** 

Sr. Parameters		Unit	Test Results		Permissi	ble Limit	S	Protocol
No.			SW3					
				A*	B*	C*	D*	
21	Nickel as Ni	mg/l	ND [DL- 0.01]	3.0	3.0	-	5.0	APHA 23rd Ed.
22	Arsenic as As	mg/l	ND [DL- 0.01]	0.2	0.2	0.2	0.2	APHA 23 <sup>rd</sup> Ed.
23	Sodium as Na	mg/l	32.40	-	-	-	-	APHA 23 <sup>rd</sup> Ed.
24	Potassium as K	mg/l	3.36	-	-		-	APHA 23 <sup>rd</sup> Ed.
25	Oil & Grease	mg/l	ND	10	20	10	20	IS:3025 (P-39)
26	Total Suspended	mg/l	14	100	600	200	Note-2	IS:3025 (P-17)
27	Dissolved Oxygen as	mg/l	5.8	-	-	-	-	IS:3025 (P-38)
28	Biological Oxygen Demand as BOD	mg/l	5	30	350	100	100	IS:3025 (P-44)
29	Chemical Oxygen Demand as COD	mg/l	28	250	(=)	-	250	IS:3025 (P-58)
30	Total Coliform*	MPN/100ml	426	-	-	-	-	IS 1622





ULR No .:

TC148142500000432F

Post Vikrampur, Distt. Angul-759 106 Odisha, India Test Report Date:

04/02/2025

Sample Particulars

Nature of the Sample

**Ground Water** 

Sample Quantity & Packaging

1 Liter, Pet Bottle

Sample Received at Lab

28/01/2025

Test Started on

28/01/2025

Test Completed

03/02/2025

Method of Sampling

: SOP/B/D-3

Date of Sampling

24/01/2025

Place of Sampling

GW1-Tentulei Village

Sr. No.	Parameters	Unit	Test Results GW1		ent as per IS: 00:2012	Protocol
				Desirable	Permissible	
1	pH	-	7.52	6.5-8.5	6.5-8.5	IS:3025 (P-11)
2	Color	Hazen	. <5	5	15	IS:3025 (P-4)
3 -	Odour		Agreeable	Agreeable	Agreeable	IS:3025 (P-5)
4	Turbidity	NTU	<1	1	5	APHA 23 <sup>rd</sup> Ed
5	Temperature	°C	25.1	-	-	IS:3025 (P-9)
6	Total Dissolved Solids	mg/l	294	500	2000	IS:3025 (P-16)
7	Total Hardness as (CaCO <sub>3</sub> )	mg/l	160	200	600	IS:3025 (P-21
8	Total Alkalinity as CaCO <sub>3</sub>	mg/l	150	200	600	IS:3025 (P-23
9	Chlorides as CI	mg/l	60	250	1000	IS:3025(P-32
10	Sulphate as SO <sub>4</sub>	mg/l	28.40	200	400	APHA 23rd Ed
11	Nitrates as NO <sub>3</sub>	mg/l	0.08	45	No Relaxation	IS:3025 (P-34
12	Calcium as Ca	mg/l	42	75	200	IS:3025 (P-40
13	Magnesium as Mg	mg/l	13.36	30	100	APHA 23 <sup>rd</sup> Ed
14	Fluoride as F	mg/l	ND	1.0	1.5	IS:3025 (P-60
15	Iron (as Fe)	mg/l	0.12	0.3	No Relaxation	APHA 23 <sup>rd</sup> Ed.
16	Manganese as Mn	mg/l	ND	0.1	0.3	IS:3025 (P-59
17	Total Chromium as Cr	mg/l	ND	0.05	No Relaxation	APHA 23 <sup>rd</sup> Ed.
18	Lead as Pb	mg/l	ND	0.01	No Relaxation	APHA 23 <sup>rd</sup> Ed.
19	Zinc as Zn	mg/l	ND	5	15	APHA 23 <sup>rd</sup> Ed.
20	Cadmium as Cd	mg/l	ND	0.003	No Relaxation	APHA 23 <sup>rd</sup> Ed.
21	Copper as Cu	mg/l	ND	0.05	1.5	APHA 23 <sup>rd</sup> Ed.



ULR No .:

TC148142500000432F

Post Vikrampur, Distt. Angul-759 106

Test Report Date:

04/02/2025

Odisha, India

Sr. No.	Parameters	Unit	Test Results	Requirem	Protocol	
			GW1	1050	00:2012	
				Desirable	Permissible	
22	Nickel as Ni	mg/l	ND [DL- 0.01]	0.02	No Relaxation	APHA 23 <sup>rd</sup> Ed.
23	Arsenic as As	mg/l	ND [DL- 0.01]	0.01	0.05	APHA 23 <sup>rd</sup> Ed.
24	Sodium as Na	mg/l	38.40	-	-	APHA 23 <sup>rd</sup> Ed.
25	Potassium as K	mg/l	3.70	-	-	APHA 23 <sup>rd</sup> Ed.
26	Oil & Grease	mg/l	ND	-	-	IS:3025 (P-39)
27	Total Suspended Solids	mg/l	ND	-	-	IS:3025 (P-17



Test Report No. :

Post Vikrampur, Distt. Angul-759 106

Test Report Date:

202501240110 04/02/2025

Odisha, India

Sample Particulars

Nature of the Sample

**Ground Water** 

Sample Quantity & Packaging

1 Liter, Pet Bottle

Sample Received at Lab

28/01/2025

Test Started on

28/01/2025

Test Completed

03/02/2025

Method of Sampling

SOP/B/D-3

Date of Sampling

24/01/2025

Place of Sampling

GW1-Tentulei Village

**Analysis Report** 

Sr. No.	Parameters	Unit	Test Results	Requirer	Protocol	
			GW1	IS: 10		
				Desirable	Permissible	
1	Taste	-	Agreeable	Agreeable	Agreeable	IS:3025 (P-8)
2	Silica	mg/l	12.40	-	-	APHA 23 <sup>rd</sup> Ed.
3	P Alkalinity as CaCO <sub>3</sub>	mg/l	BDL	-	-	IS:3025 (P-23)
4	Total Coliform*	MPN/100ml	Absent	Absent	Absent	IS 1622

(AUTHORISED SIGNATORY) (RHYTHEM BASSON\*)



ULR No.:

TC148142500000433F

Post Vikrampur, Distt. Angul-759 106 Odisha, India Test Report Date:

04/02/2025

Sample Particulars

Nature of the Sample

**Ground Water** 

Sample Quantity & Packaging

1 Liter, Pet Bottle

Sample Received at Lab

28/01/2025

Test Started on

28/01/2025

Test Completed

Method of Sampling

03/02/2025 SOP/B/D-3

Date of Sampling

24/01/2025

Place of Sampling

: GW2-Balanda Village

Sr. No.	Parameters	Unit	Test Results GW2		ent as per IS: 00:2012	Protocol
				Desirable	Permissible	-
1	pH	-	7.56	6.5-8.5	6.5-8.5	IS:3025 (P-11)
2	Color	Hazen	<5	5	15	IS:3025 (P-4)
3	Odour		Agreeable	Agreeable	Agreeable	IS:3025 (P-5)
4	Turbidity	NTU	<1	1	5	APHA 23 <sup>rd</sup> Ed
5	Temperature	°C	25.3	-	-	IS:3025 (P-9)
6	Total Dissolved Solids	mg/l	320	500	2000	IS:3025 (P-16
7	Total Hardness as (CaCO <sub>3</sub> )	mg/l	162	200	600	IS:3025 (P-21
8	Total Alkalinity as CaCO <sub>3</sub>	mg/l	110	200	600	IS:3025 (P-23
9	Chlorides as CI	mg/l	64	250	1000	IS:3025(P-32
10	Sulphate as SO <sub>4</sub>	mg/l	31.40	200	400	APHA 23 <sup>rd</sup> Ed
11	Nitrates as NO <sub>3</sub>	mg/l	0.13	45	No Relaxation	IS:3025 (P-34
12	Calcium as Ca	mg/l	46	75	200	IS:3025 (P-40
13	Magnesium as Mg	mg/l	11.42	30	100	APHA 23rd Ed
14	Fluoride as F	mg/l	0.08	1.0	1.5	IS:3025 (P-60
15	Iron (as Fe)	mg/l	0.09	0.3	No Relaxation	APHA 23rd Ed
16	Manganese as Mn	mg/l	ND [DL- 0.05]	0.1	0.3	IS:3025 (P-59
17	Total Chromium as Cr	mg/l	ND [DL- 0.05]	0.05	No Relaxation	APHA 23 <sup>rd</sup> Ed
18	Lead as Pb	mg/l	ND[DL- 0.005]	0.01	No Relaxation	APHA 23 <sup>rd</sup> Ed
19	Zinc as Zn	mg/l	0.20	5	15	APHA 23 <sup>rd</sup> Ed
20	Cadmium as Cd	mg/l	ND [DL- 0.001]	0.003	No Relaxation	APHA 23rd Ed
21	Copper as Cu	mg/l	ND [DL- 0.05]	0.05	1.5	APHA 23 <sup>rd</sup> Ed



ULR No.:

TC148142500000433F

Post Vikrampur, Distt. Angul-759 106 Odisha, India Test Report Date:

04/02/2025

Sr. No.	Parameters	Unit	Test Results	Requirem	Protocol	
			GW2	105		
				Desirable	Permissible	
22	Nickel as Ni	mg/l	ND [DL- 0.01]	0.02	No Relaxation	APHA 23 <sup>rd</sup> Ed.
23	Arsenic as As	mg/l	ND [DL- 0.01]	0.01	0.05	APHA 23 <sup>rd</sup> Ed.
24	Sodium as Na	mg/l	40.50	-	-	APHA 23 <sup>rd</sup> Ed.
25	Potassium as K	mg/l	3.96	-	-	APHA 23 <sup>rd</sup> Ed.
26	Oil & Grease	mg/l	ND	-	-	IS:3025 (P-39)
27	Total Suspended Solids	mg/l	ND	-	-	IS:3025 (P-17)



Odisha, India

Test Report No. :

202501240111

Post Vikrampur, Distt. Angul-759 106

Test Report Date:

04/02/2025

Sample Particulars

Nature of the Sample

**Ground Water** 

Sample Quantity & Packaging

1 Liter, Pet Bottle

Sample Received at Lab

28/01/2025

Test Started on

28/01/2025

Test Completed

03/02/2025

Method of Sampling

SOP/B/D-3

Date of Sampling

24/01/2025

Place of Sampling

GW2-Balanda Village

**Analysis Report** 

Sr. No.	Parameters	Unit	Test Results	Requireme	Protocol	
			GW2	1050		
				Desirable	Permissible	
1	Taste	-	Agreeable	Agreeable	Agreeable	IS:3025 (P-8)
2	Silica	mg/l	10.60	S#:	-	APHA 23 <sup>rd</sup> Ed
3	P Alkalinity as CaCO <sub>3</sub>	mg/l	BDL	-	-	IS:3025 (P-23)
4	Total Coliform*	MPN/100ml	Absent	Absent	Absent	IS 1622

(AUTHO HISED SIGNATORY) (RHYTHEM BASSON\*)



ULR No .:

TC148142500000434F

Post Vikrampur, Distt. Angul-759 106 Odisha, India Test Report Date:

04/02/2025

Sample Particulars

Nature of the Sample

**Ground Water** 

Sample Quantity & Packaging

1 Liter, Pet Bottle

Sample Received at Lab

28/01/2025

Test Started on Test Completed 28/01/2025

Method of Sampling

03/02/2025 SOP/B/D-3

Date of Sampling

24/01/2025

Place of Sampling

GW3-Kukudang Village

Sr. No.	Parameters	Unit	Test Results GW3		ent as per IS: 00:2012	Protocol
			GWS	Desirable	Permissible	-
1	pH	-	7.54	6.5-8.5	6.5-8.5	IS:3025 (P-11)
2	Color	Hazen	<5	5	15	IS:3025 (P-4)
3	Odour		Agreeable	Agreeable	Agreeable	IS:3025 (P-5)
4	Turbidity	NTU	<1	1	5	APHA 23 <sup>rd</sup> Ed.
5	Temperature	°C	25.7		-	IS:3025 (P-9)
6	Total Dissolved Solids	mg/l	302	500	2000	IS:3025 (P-16)
7	Total Hardness as (CaCO <sub>3</sub> )	mg/l	172	200	600	IS:3025 (P-21)
8	Total Alkalinity as CaCO <sub>3</sub>	mg/l	156	200	600	IS:3025 (P-23
9	Chlorides as CI	mg/l	68	250	1000	IS:3025(P-32
10	Sulphate as SO <sub>4</sub>	mg/l	36.20	200	400	APHA 23 <sup>rd</sup> Ed
11	Nitrates as NO <sub>3</sub>	mg/l	0.32	45	No Relaxation	IS:3025 (P-34
12	Calcium as Ca	mg/l	50	75	200	IS:3025 (P-40
13	Magnesium as Mg	mg/l	11.42	30	100	APHA 23 <sup>rd</sup> Ed
14	Fluoride as F	mg/l	0.12	1.0	1.5	IS:3025 (P-60
15	Iron (as Fe)	mg/l	0.18	0.3	No Relaxation	APHA 23 <sup>rd</sup> Ed
16	Manganese as Mn	mg/l	ND [DL- 0.05]	0.1	0.3	IS:3025 (P-59
17	Total Chromium as Cr	mg/l	ND [DL- 0.05]	0.05	No Relaxation	APHA 23 <sup>rd</sup> Ed.
18	Lead as Pb	mg/l	ND[DL- 0.005]	0.01	No Relaxation	APHA 23 <sup>rd</sup> Ed
19	Zinc as Zn	mg/l	0.30	5	15	APHA 23 <sup>rd</sup> Ed
20	Cadmium as Cd	mg/l	ND [DL- 0.001]	0.003	No Relaxation	APHA 23 <sup>rd</sup> Ed
21	Copper as Cu	mg/l	ND [DL- 0.05]	0.05	1.5	APHA 23rd Ed



ULR No .:

TC148142500000434F

Post Vikrampur, Distt. Angul-759 106 Odisha, India Test Report Date:

04/02/2025

Sr. No.	Parameters	Unit	Test Results	Requirem	Protocol	
			GW3	105		
				Desirable	Permissible	
22	Nickel as Ni	mg/l	ND [DL- 0.01]	0.02	No Relaxation	APHA 23 <sup>rd</sup> Ed.
23	Arsenic as As	mg/l	ND [DL- 0.01]	0.01	0.05	APHA 23 <sup>rd</sup> Ed.
24	Sodium as Na	mg/l	41.60	*	-	APHA 23 <sup>rd</sup> Ed.
25	Potassium as K	mg/l	4.08	-	-	APHA 23 <sup>rd</sup> Ed.
26	Oil & Grease	mg/l	ND	-	-	IS:3025 (P-39)
27	Total Suspended Solids	mg/l	ND	-	-	IS:3025 (P-17)



Odisha, India

Test Report No. :

202501240112

Post Vikrampur, Distt. Angul-759 106

Test Report Date:

04/02/2025

Sample Particulars

Nature of the Sample

**Ground Water** 

Sample Quantity & Packaging

1 Liter, Pet Bottle

Sample Received at Lab

28/01/2025

Test Started on

28/01/2025

Test Completed

03/02/2025

Method of Sampling

SOP/B/D-3

Date of Sampling

24/01/2025

Place of Sampling

GW3-Kukudang Village

**Analysis Report** 

Sr. No.	Parameters	Unit	Test Results	Requireme	Protocol	
			GW3	1050		
				Desirable	Permissible	
1	Taste	-	Agreeable	Agreeable	Agreeable	IS:3025 (P-8)
2	Silica	mg/l	9.80	-	-	APHA 23 <sup>rd</sup> Ed.
3	P Alkalinity as CaCO <sub>3</sub>	mg/l	BDL	- (e)		IS:3025 (P-23)
4	Total Coliform*	MPN/100ml	Absent	Absent	Absent	IS 1622

(AUTHORISED SIGNATORY) (RHY (HEM BASSON\*)



ULR No .:

TC148142500000435F

Post Vikrampur, Distt. Angul-759 106 Odisha, India Test Report Date:

04/02/2025

Sample Particulars

Nature of the Sample

Surface Water

Sample Quantity & Packaging

1 Liter, Pet Bottle

Sample Received at Lab

28/01/2025

Test Started on

28/01/2025

Test Completed

Method of Sampling

03/02/2025

Date of Sampling

SOP/B/D-3 24/01/2025

Place of Sampling

SW1-Pump House

Sr. No.	Parameters	Unit	Test Results		Permissi	ole Limits		Protocol
			SW1	A*	B*	C*	D*	
				_ ^				
1	pH	-	7.26	5.5-9.0	5.5-9.0	5.5-9.0	5.5-9.0	IS:3025 (P-11)
2	Color	Hazen	<5	Note-1	Note-1	Note-1	Note-1	IS:3025 (P-4)
3	Turbidity	NTU	<1	-	-		-	APHA 23 <sup>rd</sup> Ed.
4	Temperature	°C	25.8	Note-5	-	-	Note-5	IS:3025 (P-9)
5	Total Dissolved Solids	mg/l	294	-	-	-	-	IS:3025 (P-16)
6	Total Hardness as (CaCO <sub>3</sub> )	mg/l	146	-	-	-	-	IS:3025 (P-21)
7	Total Alkalinity as CaCO <sub>3</sub>	mg/l	120	-	-	-	-	IS:3025 (P-23)
8	Chlorides as Cl	mg/l	60	*	*	*	*	IS:3025(P-32
9	Sulphate as SO <sub>4</sub>	mg/l	31.90	*	*		*	APHA 23 <sup>rd</sup> Ed.
10	Nitrates as NO <sub>3</sub>	mg/l	0.52	10	-	-	20	IS:3025 (P-34)
11	Calcium as Ca	mg/l	44	-	-	-	-	IS:3025 (P-40)
12	Magnesium as Mg	mg/l	8.74	-	-	-	-	APHA 23 <sup>rd</sup> Ed.
13	Fluoride as F	mg/l	0.11	2.0	15	-	15	IS:3025 (P-60)
14	Iron (as Fe)	mg/l	0.31	3.0	3.0	-	3.0	APHA 23rd Ed.
15	Manganese as Mn	mg/l	ND [DL- 0.05]	2.0	2.0	-	2.0	IS:3025 (P-59)
16	Total Chromium as Cr	mg/l	ND [DL- 0.05]	2.0	2.0	-	2.0	APHA 23rd Ed.
17	Lead as Pb	mg/l	ND[DL- 0.005]	0.1	1.0	-	2.0	APHA 23rd Ed.
18	Zinc as Zn	mg/l	0.45	5.0	15	-	15	APHA 23rd Ed.
19	Cadmium as Cd	mg/l	ND [DL- 0.001]	2.0	1.0	-	2.0	APHA 23 <sup>rd</sup> Ed.
20	Copper as Cu	mg/l	ND [DL- 0.05]	3.0	3.0	-	3.0	APHA 23 <sup>rd</sup> Ed.



ULR No.:

TC148142500000435F

Post Vikrampur, Distt. Angul-759 106 Odisha, India

Test Report Date:

04/02/2025

# **Analysis Report**

Sr. No.	Parameters	Unit	Unit Test Results SW1		Permissible Limits				
			0111	A*	B*	C*	D*		
21	Nickel as Ni	mg/l	ND [DL- 0.01]	3.0	3.0	-	5.0	APHA 23 <sup>rd</sup> Ed.	
22	Arsenic as As	mg/l	ND [DL- 0.01]	0.2	0.2	0.2	0.2	APHA 23 <sup>rd</sup> Ed.	
23	Sodium as Na	mg/l	30.60	-	-	-	-	APHA 23 <sup>rd</sup> Ed.	
24	Potassium as K	mg/l	3.16	-	-	-	-	APHA 23 <sup>rd</sup> Ed.	
25	Oil & Grease	mg/l	ND	10	20	10	20	IS:3025 (P-39)	
26	Total Suspended	mg/l	14	100	600	200	Note-2	IS:3025 (P-17)	
27	Dissolved Oxygen as	mg/l	6.1	-	-	-	-	IS:3025 (P-38)	
28	Biological Oxygen Demand as BOD	mg/l	5	30	350	100	100	IS:3025 (P-44)	
29	Chemical Oxygen Demand as COD	mg/l	24	250	-	-	250	IS:3025 (P-58)	
30	Total Coliform*	MPN/100ml	503	-	-	-	T .	IS 1622	

Remark:
ND-Not Detected, DL-Detection Limit, A\*- Inland Surface Water, B\*-Public Sewer, C\*-Land for Irrigation, D\*-Marine Coastal Areas

(AUTHORISED SIGNATORY) (RHYTHEM BASSON\*)



ULR No .:

TC148142500000436F

Post Vikrampur, Distt. Angul-759 106 Odisha, India Test Report Date:

04/02/2025

Sample Particulars

Nature of the Sample

Surface Water

Sample Quantity & Packaging

1 Liter, Pet Bottle

Sample Received at Lab

28/01/2025

Test Started on

28/01/2025

**Test Completed** 

03/02/2025

Method of Sampling

SOP/B/D-3

Date of Sampling

24/01/2025

Place of Sampling

SW2-River Near Jatia Bridge

Sr. No.	Parameters	Unit	Test Results		Permissil	ole Limits		Protocol
	*		SW2	A*	B*	C*	D*	
1	pH	-	7.82	5.5-9.0	5.5-9.0	5.5-9.0	5.5-9.0	IS:3025 (P-11)
2	Color	Hazen	<5	Note-1	Note-1	Note-1	Note-1	IS:3025 (P-4)
3	Turbidity	NTU	<1	-	-		-	APHA 23 <sup>rd</sup> Ed.
4	Temperature	°C	26.2	Note-5	-	-	Note-5	IS:3025 (P-9)
5	Total Dissolved Solids	mg/l	346	-	-	-	-	IS:3025 (P-16)
6	Total Hardness as (CaCO <sub>3</sub> )	mg/l	170	-	-	-	-	IS:3025 (P-21)
7	Total Alkalinity as CaCO <sub>3</sub>	mg/l	152	-	-	-	-	IS:3025 (P-23
8	Chlorides as Cl	mg/l	90		*			IS:3025(P-32
9	Sulphate as SO <sub>4</sub>	mg/l	34.20	*	*	*	*	APHA 23 <sup>rd</sup> Ed
10	Nitrates as NO <sub>3</sub>	mg/l	1.20	10	-	-	20	IS:3025 (P-34
11	Calcium as Ca	mg/l	58	-	-	-	-	IS:3025 (P-40
12	Magnesium as Mg	mg/l	6.07	-	-	-	-	APHA 23 <sup>rd</sup> Ed
13	Fluoride as F	mg/l	0.08	2.0	15	-	15	IS:3025 (P-60
14	Iron (as Fe)	mg/l	0.22	3.0	3.0	-	3.0	APHA 23 <sup>rd</sup> Ed
15	Manganese as Mn	mg/l	ND [DL- 0.05]	2.0	2.0	-	2.0	IS:3025 (P-59
16	Total Chromium as Cr	mg/l	ND [DL- 0.05]	2.0	2.0	-	2.0	APHA 23 <sup>rd</sup> Ed
17	Lead as Pb	mg/l	ND [DL- 0.005]	0.1	1.0	-	2.0	APHA 23 <sup>rd</sup> Ed
18	Zinc as Zn	mg/l	0.25	5.0	15	-	15	APHA 23 <sup>rd</sup> Ed
19	Cadmium as Cd	mg/l	ND [DL- 0.001]	2.0	1.0	-	2.0	APHA 23rd Ed
20	Copper as Cu	mg/l	ND [DL- 0.05]	3.0	3.0	-	3.0	APHA 23rd Ed



ULR No .:

TC148142500000436F

Post Vikrampur, Distt. Angul-759 106 Odisha, India

Test Report Date:

04/02/2025

**Analysis Report** 

Sr. No.	Parameters	Unit	Test Results		Permissi	S	Protocol	
			SW2					
				A*	B*	C*	D*	
21	Nickel as Ni	mg/l	ND [DL- 0.01]	3.0	3.0	-	5.0	APHA 23 <sup>rd</sup> Ed.
22	Arsenic as As	mg/l	ND [DL- 0.01]	0.2	0.2	0.2	0.2	APHA 23rd Ed.
23	Sodium as Na	mg/l	27.80	-	-	-	-	APHA 23rd Ed.
24	Potassium as K	mg/l	2.80	-	-	-	-	APHA 23rd Ed.
25	Oil & Grease	mg/l	ND	10	20	10	20	IS:3025 (P-39)
26	Total Suspended Solids	mg/l	16	100	600	200	Note-2	IS:3025 (P-17)
27	Dissolved Oxygen as DO	mg/l	6.3	-	-	-	-	IS:3025 (P-38)
28	Biological Oxygen Demand as BOD	mg/l	4	30	350	100	100	IS:3025 (P-44)
29	Chemical Oxygen Demand as COD	mg/l	20	250	-	-	250	IS:3025 (P-58)
30	Total Coliform*	MPN/100ml	788	-	-	-	-	IS 1622

Remark:
ND-Not Detected, DL-Detection Limit, A\*- Inland Surface Water, B\*-Public Sewer, C\*-Land for Irrigation, D\*-Marine Coastal Areas

(AUTHOR SED SIGNATORY) (RHYTNEM BASSON\*)



Odisha, India

ULR No .:

TC148142500000437F

Post Vikrampur, Distt. Angul-759 106

Test Report Date:

04/02/2025

Sample Particulars

Nature of the Sample

Surface Water

Sample Quantity & Packaging

1 Liter, Pet Bottle

Sample Received at Lab

28/01/2025

Test Started on

28/01/2025

Test Completed

03/02/2025

Method of Sampling

SOP/B/D-3

Date of Sampling

24/01/2025

Place of Sampling

SW3-River Near PTBS Thermal Area

Sr. No.	Parameters	Unit	Test Results		Permissil	ole Limits		Protocol
NO.			SW3					
				A*	B*	C*	D*	
1	pH	-	7.64	5.5-9.0	5.5-9.0	5.5-9.0	5.5-9.0	IS:3025 (P-11)
2	Color	Hazen	<5	Note-1	Note-1	Note-1	Note-1	IS:3025 (P-4)
3	Turbidity	NTU	<1	-	-	-	-	APHA 23 <sup>rd</sup> Ed.
4	Temperature	°C	26.3	Note-5	-	-	Note-5	IS:3025 (P-9)
5	Total Dissolved Solids	mg/l	286	-	-	-	-	IS:3025 (P-16)
6	Total Hardness as (CaCO <sub>3</sub> )	mg/l	148	-	-	-	-	IS:3025 (P-21)
7	Total Alkalinity as CaCO <sub>3</sub>	mg/l	100	-	-	-	-	IS:3025 (P-23
8	Chlorides as Cl	mg/l	62	*	*	*		IS:3025(P-32
9	Sulphate as SO <sub>4</sub>	mg/l	27.50	*		*	*	APHA 23 <sup>rd</sup> Ed
10	Nitrates as NO <sub>3</sub>	mg/l	0.80	10	-	-	20	IS:3025 (P-34
11	Calcium as Ca	mg/l	38	-	-	-	-	IS:3025 (P-40)
12	Magnesium as Mg	mg/l	12.87	-	-	-	-	APHA 23 <sup>rd</sup> Ed
13	Fluoride as F	mg/l	0.14	2.0	15	-	15	IS:3025 (P-60
14	Iron (as Fe)	mg/l	0.26	3.0	3.0	-	3.0	APHA 23 <sup>rd</sup> Ed.
15	Manganese as Mn	mg/l	ND [DL- 0.05]	2.0	2.0	-	2.0	IS:3025 (P-59
16	Total Chromium as Cr	mg/l	ND [DL- 0.05]	2.0	2.0	-	2.0	APHA 23 <sup>rd</sup> Ed.
17	Lead as Pb	mg/l	ND [DL- 0.005]	0.1	1.0	-	2.0	APHA 23 <sup>rd</sup> Ed
18	Zinc as Zn	mg/l	0.40	5.0	15	-	15	APHA 23 <sup>rd</sup> Ed
19	Cadmium as Cd	mg/l	ND [DL- 0.001]	2.0	1.0	-	2.0	APHA 23 <sup>rd</sup> Ed.
20	Copper as Cu	mg/l	ND [DL- 0.05]	3.0	3.0	-	3.0	APHA 23rd Ed



ULR No .:

TC148142500000437F

Post Vikrampur, Distt. Angul-759 106 Odisha, India

Test Report Date:

04/02/2025

**Analysis Report** 

Sr. Parameters		Unit	Test Results		Permissil	ole Limits	S	Protocol	
No.			SW3						
				A*	B*	C*	D*	1	
21	Nickel as Ni	mg/l	ND [DL- 0.01]	3.0	3.0	-	5.0	APHA 23 <sup>rd</sup> Ed.	
22	Arsenic as As	mg/l	ND [DL- 0.01]	0.2	0.2	0.2	0.2	APHA 23rd Ed.	
23	Sodium as Na	mg/l	33.20		-	-	-	APHA 23 <sup>rd</sup> Ed	
24	Potassium as K	mg/l	3.36	-	-	-		APHA 23 <sup>rd</sup> Ed	
25	Oil & Grease	mg/l	ND	10	20	10	20	IS:3025 (P-39	
26	Total Suspended	mg/l	15	100	600	200	Note-2	IS:3025 (P-17	
27	Dissolved Oxygen as	mg/l	6.2	-	-	-	-	IS:3025 (P-38	
28	Biological Oxygen Demand as BOD	mg/l	5	30	350	100	100	IS:3025 (P-44	
29	Chemical Oxygen Demand as COD	mg/l	26	250	-	-	250	IS:3025 (P-58	
30	Total Coliform*	MPN/100ml	281			-	-	IS 1622	

Remark:
ND-Not Detected, DL-Detection Limit, A\*- Inland Surface Water, B\*-Public Sewer, C\*-Land for Irrigation, D\*-Marine Coastal Areas

(AUTHORISED SIGNATORY) (RHYTHEM BASSON\*)





ULR No .:

TC148142500001137F

Post Vikrampur, Distt. Angul-759 106 Odisha, India Test Report Date:

07/03/2025

Sample Particulars

Nature of the Sample

**Ground Water** 

Sample Quantity & Packaging

1 Liter, Pet Bottle

Sample Received at Lab Test Started on 28/02/2025 28/02/2025

Test Completed Method of Sampling : 06/03/2025 : SOP/B/D-3

Date of Sampling
Place of Sampling

24/02/2025

Sampling : GW1-Tentulei Village

Sr. No.	Parameters	Unit	Test Results GW1		ent as per IS: 00:2012	Protocol
			0	Desirable	Permissible	
1	pH	-	7.64	6.5-8.5	6.5-8.5	IS:3025 (P-11)
2	Color	Hazen	<5	5	15	IS:3025 (P-4)
3	Odour		Agreeable	Agreeable	Agreeable	IS:3025 (P-5)
4	Turbidity	NTU	<1	1	5	APHA 23 <sup>rd</sup> Ed
5	Temperature	°C	25.4	-	-	IS:3025 (P-9)
6	Total Dissolved Solids	mg/l	318	500	2000	IS:3025 (P-16)
7	Total Hardness as (CaCO <sub>3</sub> )	mg/l	172	200	600	IS:3025 (P-21
8	Total Alkalinity as CaCO <sub>3</sub>	mg/l	160	200	600	IS:3025 (P-23
9	Chlorides as CI	mg/l	56	250	1000	IS:3025(P-32
10	Sulphate as SO <sub>4</sub>	mg/l	31.20	200	400	APHA 23 <sup>rd</sup> Ed
11	Nitrates as NO <sub>3</sub>	mg/l	0.12	45	No Relaxation	IS:3025 (P-34
12	Calcium as Ca	mg/l	36	75	200	IS:3025 (P-40
13	Magnesium as Mg	mg/l	19.92	30	100	APHA 23rd Ed
14	Fluoride as F	mg/l	ND	1.0	1.5	IS:3025 (P-60
15	Iron (as Fe)	mg/l	0.9	0.3	No Relaxation	APHA 23rd Ed.
16	Manganese as Mn	mg/l	ND	0.1	0.3	IS:3025 (P-59)
17	Total Chromium as Cr	mg/l	ND	0.05	No Relaxation	APHA 23 <sup>rd</sup> Ed.
18	Lead as Pb	mg/l	ND	0.01	No Relaxation	APHA 23 <sup>rd</sup> Ed.
19	Zinc as Zn	mg/l	ND	5	15	APHA 23rd Ed.



ULR No .:

TC148142500001137F

Post Vikrampur, Distt. Angul-759 106

Test Report Date:

07/03/2025

Odisha, India

Sr. No.	Parameters	Unit	Test Results	Requirem	Protocol	
			GW1	1050		
				Desirable	Permissible	
20	Cadmium as Cd	mg/l	ND	0.003	No Relaxation	APHA 23 <sup>rd</sup> Ed.
21	Copper as Cu	mg/l	ND	0.05	1.5	APHA 23 <sup>rd</sup> Ed.
22	Nickel as Ni	mg/l	ND [DL- 0.01]	0.02	No Relaxation	APHA 23 <sup>rd</sup> Ed.
23	Arsenic as As	mg/l	ND [DL- 0.01]	0.01	0.05	APHA 23 <sup>rd</sup> Ed.
24	Sodium as Na	mg/l	35.80	-	-	APHA 23 <sup>rd</sup> Ed.
25	Potassium as K	mg/l	3.60	-	-	APHA 23 <sup>rd</sup> Ed.
26	Oil & Grease	mg/l	ND	-	-	IS:3025 (P-39)
27	Total Suspended Solids	mg/l	ND	-	-	IS:3025 (P-17)



Test Report No. :

Post Vikrampur, Distt. Angul-759 106

Test Report Date:

202502240110 07/03/2025

Odisha, India

Sample Particulars

Nature of the Sample

: Ground Water

Sample Quantity & Packaging

1 Liter, Pet Bottle

Sample Received at Lab

28/02/2025

Test Started on

28/02/2025

Test Completed

06/03/2025

Method of Sampling

SOP/B/D-3

Date of Sampling

24/02/2025

Place of Sampling

GW1-Tentulei Village

**Analysis Report** 

Sr. No.	Parameters	Unit	Test Results GW1	Requirer IS: 10	Protocol	
				Desirable	Permissible	
1	Taste	-	Agreeable	Agreeable	Agreeable	IS:3025 (P-8)
2	Silica	mg/l	10.80	-	-	APHA 23 <sup>rd</sup> Ed.
3	P Alkalinity as CaCO <sub>3</sub>	mg/l	BDL	_	-	IS:3025 (P-23)
4	Total Coliform*	MPN/100ml	Absent	Absent	Absent	IS 1622

(AUTHORISED SIGNATORY) (RHYTNEM BASSON\*)

Nitya Laboratories



ULR No .:

TC148142500001138F

Post Vikrampur, Distt. Angul-759 106 Odisha, India Test Report Date:

07/03/2025

Sample Particulars

Nature of the Sample : Ground Water
Sample Quantity & Packaging : 1 Liter, Pet Bottle

 Sample Received at Lab
 : 28/02/2025

 Test Started on
 : 28/02/2025

 Test Completed
 : 06/03/2025

 Method of Sampling
 : SOP/B/D-3

 Date of Sampling
 : 24/02/2025

Place of Sampling : GW2-Balanda Village

Sr. No.	Parameters	Unit	Test Results		ent as per IS: 00:2012	Protocol	
			GW2	Desirable	Permissible	-	
1	pH	-	7.47	6.5-8.5	6.5-8.5	IS:3025 (P-11)	
2	Color	Hazen	<5	5	15	IS:3025 (P-4)	
3	Odour		Agreeable	Agreeable	Agreeable	IS:3025 (P-5)	
4	Turbidity	NTU	<1	1	5	APHA 23rd Ed	
5	Temperature	°C	25.8	-	-	IS:3025 (P-9)	
6	Total Dissolved Solids	mg/l	286	500	2000	IS:3025 (P-16	
7	Total Hardness as (CaCO <sub>3</sub> )	mg/l	154	200	600	IS:3025 (P-21	
8	Total Alkalinity as CaCO <sub>3</sub>	mg/l	120	200	600	IS:3025 (P-23	
9	Chlorides as CI	mg/l	70	250	1000	IS:3025(P-32	
10	Sulphate as SO <sub>4</sub>	mg/l	35.50	200	400	APHA 23 <sup>rd</sup> Ed	
11	Nitrates as NO <sub>3</sub>	mg/l	0.18	45	No Relaxation	IS:3025 (P-34	
12	Calcium as Ca	mg/l	40	75	200	IS:3025 (P-40	
13	Magnesium as Mg	mg/l	13.12	30	100	APHA 23rd Ed	
14	Fluoride as F	mg/l	0.10	1.0	1.5	IS:3025 (P-60	
15	Iron (as Fe)	mg/l	0.15	0.3	No Relaxation	APHA 23rd Ed	
16	Manganese as Mn	mg/l	ND [DL- 0.05]	0.1	0.3	IS:3025 (P-59	
17	Total Chromium as Cr	mg/l	ND [DL- 0.05]	0.05	No Relaxation	APHA 23 <sup>rd</sup> Ed	
18	Lead as Pb	mg/l	ND[DL- 0.005]	0.01	No Relaxation	APHA 23 <sup>rd</sup> Ed	
19	Zinc as Zn	mg/l	0.17	5	15	APHA 23 <sup>rd</sup> Ed	



ULR No .:

TC148142500001138F

Post Vikrampur, Distt. Angul-759 106 Odisha, India Test Report Date:

07/03/2025

Sr. No.	Parameters	Unit	Test Results	Requirem	Protocol	
			GW2	105	1	
				Desirable	Permissible	1
20	Cadmium as Cd	mg/l	ND	0.003	No Relaxation	APHA 23 <sup>rd</sup> Ed.
21	Copper as Cu	mg/l	ND	0.05	1.5	APHA 23 <sup>rd</sup> Ed.
22	Nickel as Ni	mg/l	ND [DL- 0.01]	0.02	No Relaxation	APHA 23 <sup>rd</sup> Ed.
23	Arsenic as As	mg/l	ND [DL- 0.01]	0.01	0.05	APHA 23 <sup>rd</sup> Ed.
24	Sodium as Na	mg/l	38.20	-	-	APHA 23 <sup>rd</sup> Ed.
25	Potassium as K	mg/l	3.70	-	-	APHA 23 <sup>rd</sup> Ed.
26	Oil & Grease	mg/l	ND	-	-	IS:3025 (P-39)
27	Total Suspended Solids	mg/l	ND	-	-	IS:3025 (P-17)

Odisha, India

Test Report No. :

Post Vikrampur, Distt. Angul-759 106

Test Report Date:

202502240111 07/03/2025

Sample Particulars

Nature of the Sample

**Ground Water** 

Sample Quantity & Packaging

1 Liter, Pet Bottle

Sample Received at Lab

28/02/2025

Test Started on

28/02/2025

Test Completed

06/03/2025

Method of Sampling

SOP/B/D-3

Date of Sampling

24/02/2025

Place of Sampling

GW2-Balanda Village

**Analysis Report** 

Sr. No.	Parameters	Unit	Test Results GW2	Requireme 1050	Protocol	
				Desirable	Permissible	
1	Taste	-	Agreeable	Agreeable	Agreeable	IS:3025 (P-8)
2	Silica	mg/l	12.40	-	-	APHA 23 <sup>rd</sup> Ed.
3	P Alkalinity as CaCO <sub>3</sub>	mg/l	BDL	-	-	IS:3025 (P-23)
4	Total Coliform*	MPN/100ml	Absent	Absent	Absent	IS 1622

(AUTHORISED SIGNATORY) (RHYTHEM BASSON\*)





ULR No.:

TC148142500001139F

Post Vikrampur, Distt. Angul-759 106 Odisha, India Test Report Date:

07/03/2025

Sample Particulars

Nature of the Sample

**Ground Water** 

Sample Quantity & Packaging

1 Liter, Pet Bottle

Sample Received at Lab

28/02/2025

Test Started on

20/02/2020

Test Completed

28/02/2025 06/03/2025

Method of Sampling

SOP/B/D-3

Date of Sampling

24/02/2025

Place of Sampling

GW3-Kukudang Village

Sr. No.	Parameters	Unit	Test Results	CONTRACTOR DESIGNATION OF THE PERSON OF THE	ent as per IS: 00:2012	Protocol
			GW3	Desirable	Permissible	
				Desirable	reimssible	
1	pH	•	7.62	6.5-8.5	6.5-8.5	IS:3025 (P-11
2	Color	Hazen	<5	5	15	IS:3025 (P-4)
3	Odour		Agreeable	Agreeable	Agreeable	IS:3025 (P-5)
4	Turbidity	NTU	<1	1	5	APHA 23 <sup>rd</sup> Ed
5	Temperature	°C	25.3	-	-	IS:3025 (P-9)
6	Total Dissolved Solids	mg/l	326	500	2000	IS:3025 (P-16
7	Total Hardness as (CaCO <sub>3</sub> )	mg/l	168	200	600	IS:3025 (P-21
8	Total Alkalinity as CaCO <sub>3</sub>	mg/l	140	200	600	IS:3025 (P-23
9	Chlorides as CI	mg/l	70	250	1000	IS:3025(P-32
10	Sulphate as SO <sub>4</sub>	mg/l	34.50	200	400	APHA 23rd Ed
11	Nitrates as NO <sub>3</sub>	mg/l	0.23	45	No Relaxation	IS:3025 (P-34
12	Calcium as Ca	mg/l	44	75	200	IS:3025 (P-40
13	Magnesium as Mg	mg/l	14.09	30	100	APHA 23rd Ed
14	Fluoride as F	mg/l	0.16	1.0	1.5	IS:3025 (P-60
15	Iron (as Fe)	mg/l	0.24	0.3	No Relaxation	APHA 23rd Ed
16	Manganese as Mn	mg/l	ND [DL- 0.05]	0.1	0.3	IS:3025 (P-59
17	Total Chromium as Cr	mg/l	ND [DL- 0.05]	0.05	No Relaxation	APHA 23 <sup>rd</sup> Ed
18	Lead as Pb	mg/l	ND[DL- 0.005]	0.01	No Relaxation	APHA 23rd Ed
19	Zinc as Zn	mg/l	0.25	5	15	APHA 23 <sup>rd</sup> Ed



ULR No.:

TC148142500001139F

Post Vikrampur, Distt. Angul-759 106 Odisha, India Test Report Date:

07/03/2025

Sr. No.	Parameters	Unit	Test Results	Requirem	Protocol	
			GW3	105		
				Desirable	Permissible	
20	Cadmium as Cd	mg/l	ND	0.003	No Relaxation	APHA 23 <sup>rd</sup> Ed.
21	Copper as Cu	mg/l	ND	0.05	1.5	APHA 23 <sup>rd</sup> Ed.
22	Nickel as Ni	mg/l	ND [DL- 0.01]	0.02	No Relaxation	APHA 23 <sup>rd</sup> Ed.
23	Arsenic as As	mg/l	ND [DL- 0.01]	0.01	0.05	APHA 23 <sup>rd</sup> Ed.
24	Sodium as Na	mg/l	39.30	-	-	APHA 23 <sup>rd</sup> Ed.
25	Potassium as K	mg/l	3.80	-	-	APHA 23 <sup>rd</sup> Ed.
26	Oil & Grease	mg/l	ND		-	IS:3025 (P-39)
27	Total Suspended Solids	mg/l	ND	-	-	IS:3025 (P-17)



Odisha, India

Test Report No. :

202502240112

Post Vikrampur, Distt. Angul-759 106

Test Report Date:

07/03/2025

Sample Particulars

Nature of the Sample

**Ground Water** 

Sample Quantity & Packaging

1 Liter, Pet Bottle

Sample Received at Lab

28/02/2025

Test Started on

28/02/2025

Test Completed

06/03/2025

Method of Sampling Date of Sampling SOP/B/D-3 24/02/2025

Place of Sampling

GW3-Kukudang Village

**Analysis Report** 

Sr. No.	Parameters	Unit	Test Results	Requireme	Protocol	
			GW3	1050		
				Desirable	Permissible	
1	Taste	-	Agreeable	Agreeable	Agreeable	IS:3025 (P-8)
2	Silica	mg/l	11.40	-	-	APHA 23 <sup>rd</sup> Ed.
3	P Alkalinity as CaCO <sub>3</sub>	mg/l	BDL	-	-	IS:3025 (P-23)
4	Total Coliform*	MPN/100ml	Absent	Absent	Absent	IS 1622

(AUTHORISED SIGNATORY) (RHYTHEM BASSON\*)





ULR No .:

TC148142500001140F

Post Vikrampur, Distt. Angul-759 106 Odisha, India

Test Report Date:

07/03/2025

Sample Particulars

Nature of the Sample

**Surface Water** 1 Liter, Pet Bottle

Sample Quantity & Packaging Sample Received at Lab

28/02/2025

Test Started on

28/02/2025

**Test Completed** Method of Sampling 06/03/2025

Date of Sampling

SOP/B/D-3 24/02/2025

Place of Sampling

SW1-Pump House

**Analysis Report** 

Sr. No.	Parameters	Unit	Test Results		Permissil	ole Limits		Protocol
NO.			SW1					
				A*	B*	C*	D*	
1	pH	-	7.35	5.5-9.0	5.5-9.0	5.5-9.0	5.5-9.0	IS:3025 (P-11)
2	Color	Hazen	<5	Note-1	Note-1	Note-1	Note-1	IS:3025 (P-4)
3	Turbidity	NTU	<1	-	-	-	-	APHA 23 <sup>rd</sup> Ed
4	Temperature	°C	25.6	Note-5	-	-	Note-5	IS:3025 (P-9)
5	Total Dissolved Solids	mg/l	316	-	-	-	-	IS:3025 (P-16
6	Total Hardness as (CaCO <sub>3</sub> )	mg/l	150	-	-	-	-	IS:3025 (P-21
7	Total Alkalinity as CaCO <sub>3</sub>	mg/l	110	-	-	1.0	-	IS:3025 (P-23
8	Chlorides as Cl	mg/l	54		*			IS:3025(P-32
9	Sulphate as SO <sub>4</sub>	mg/l	34.20		*	*	*	APHA 23 <sup>rd</sup> Ed
10	Nitrates as NO <sub>3</sub>	mg/l	0.36	10	-	-	20	IS:3025 (P-34
11	Calcium as Ca	mg/l	48	-	-	-	-	IS:3025 (P-40
12	Magnesium as Mg	mg/l	7.29	-	-	-	-	APHA 23 <sup>rd</sup> Ed
13	Fluoride as F	mg/l	0.16	2.0	15	-	15	IS:3025 (P-60
14	Iron (as Fe)	mg/l	0.25	3.0	3.0	-	3.0	APHA 23 <sup>rd</sup> Ed
15	Manganese as Mn	mg/l	ND [DL- 0.05]	2.0	2.0	-	2.0	IS:3025 (P-59
16	Total Chromium as Cr	mg/l	ND [DL- 0.05]	2.0	2.0	-	2.0	APHA 23rd Ed
17	Lead as Pb	mg/l	ND[DL- 0.005]	0.1	1.0	-	2.0	APHA 23rd Ed
18	Zinc as Zn	mg/l	0.36	5.0	15	-	15	APHA 23 <sup>rd</sup> Ed
19	Cadmium as Cd	mg/l	ND [DL- 0.001]	2.0	1.0	-	2.0	APHA 23 <sup>rd</sup> Ed
20	Copper as Cu	mg/l	ND [DL- 0.05]	3.0	3.0	-	3.0	APHA 23 <sup>rd</sup> Ed



ULR No.:

TC148142500001140F

Post Vikrampur, Distt. Angul-759 106 Odisha, India

Test Report Date:

07/03/2025

**Analysis Report** 

Sr.	Parameters	Unit	Unit Test Results		Permissi	S	Protocol	
No.			SW1					
				A*	B*	C*	D*	
21	Nickel as Ni	mg/l	ND [DL- 0.01]	3.0	3.0	-	5.0	APHA 23rd Ed.
22	Arsenic as As	mg/l	ND [DL- 0.01]	0.2	0.2	0.2	0.2	APHA 23 <sup>rd</sup> Ed.
23	Sodium as Na	mg/l	32.50	-	-	-	-	APHA 23 <sup>rd</sup> Ed.
24	Potassium as K	mg/l	3.36		-	-	-	APHA 23 <sup>rd</sup> Ed.
25	Oil & Grease	mg/l	ND	10	20	10	20	IS:3025 (P-39)
26	Total Suspended	mg/l	12	100	600	200	Note-2	IS:3025 (P-17)
27	Dissolved Oxygen as	mg/l	6.3	-	-	-	-	IS:3025 (P-38)
28	Biological Oxygen Demand as BOD	mg/l	4	30	350	100	100	IS:3025 (P-44)
29	Chemical Oxygen Demand as COD	mg/l	20	250	-	-	250	IS:3025 (P-58)
30	Total Coliform*	MPN/100ml	480	-	-	-	-	IS 1622





ULR No .:

TC148142500001141F

Post Vikrampur, Distt. Angul-759 106 Odisha, India

Test Report Date:

07/03/2025

Sample Particulars

Nature of the Sample

Surface Water

Sample Quantity & Packaging

1 Liter, Pet Bottle

Sample Received at Lab

28/02/2025

Test Started on

28/02/2025

Test Completed

06/03/2025

Method of Sampling

SOP/B/D-3

Date of Sampling

24/02/2025

Place of Sampling

SW2-River Near Jatia Bridge

**Analysis Report** 

Sr. No.	Parameters	Unit	Test Results			Protocol		
			SW2	A*	B*	C*	D*	-
				A-	B.	C.	D.	
1	pH	-	7.77	5.5-9.0	5.5-9.0	5.5-9.0	5.5-9.0	IS:3025 (P-11)
2	Color	Hazen	<5	Note-1	Note-1	Note-1	Note-1	IS:3025 (P-4)
3	Turbidity	NTU	<1	-	-	-	-	APHA 23rd Ed.
4	Temperature	°C	25.8	Note-5	-	-	Note-5	IS:3025 (P-9)
5	Total Dissolved Solids	mg/l	336	-	-	-	-	IS:3025 (P-16)
6	Total Hardness as (CaCO <sub>3</sub> )	mg/l	160	-	-	-	-	IS:3025 (P-21
7	Total Alkalinity as CaCO <sub>3</sub>	mg/l	140	-	-	-	-	IS:3025 (P-23
8	Chlorides as CI	mg/l	80	*	*	*	*	IS:3025(P-32
9	Sulphate as SO <sub>4</sub>	mg/l	33.50	*	*	*	*	APHA 23 <sup>rd</sup> Ed
10	Nitrates as NO <sub>3</sub>	mg/l	0.80	10	-	-	20	IS:3025 (P-34
11	Calcium as Ca	mg/l	52	-	-	-	-	IS:3025 (P-40
12	Magnesium as Mg	mg/l	7.29	1.7	-	-	-	APHA 23 <sup>rd</sup> Ed
13	Fluoride as F	mg/l	0.12	2.0	15	-	15	IS:3025 (P-60
14	Iron (as Fe)	mg/l	0.30	3.0	3.0	-	3.0	APHA 23rd Ed
15	Manganese as Mn	mg/l	ND [DL- 0.05]	2.0	2.0	-	2.0	IS:3025 (P-59
16	Total Chromium as Cr	mg/l	ND [DL- 0.05]	2.0	2.0	-	2.0	APHA 23 <sup>rd</sup> Ed
17	Lead as Pb	mg/l	ND [DL- 0.005]	0.1	1.0	-	2.0	APHA 23 <sup>rd</sup> Ed
18	Zinc as Zn	mg/l	0.35	5.0	15	-	15	APHA 23 <sup>rd</sup> Ed
19	Cadmium as Cd	mg/l	ND [DL- 0.001]	2.0	1.0	-	2.0	APHA 23 <sup>rd</sup> Ed
20	Copper as Cu	mg/l	ND [DL- 0.05]	3.0	3.0	-	3.0	APHA 23rd Ed



ULR No .:

TC148142500001141F

Post Vikrampur, Distt. Angul-759 106 Odisha, India

Test Report Date:

07/03/2025

**Analysis Report** 

Sr. No.	Parameters	Unit	Test Results		S	Protocol		
			SW2					
				A*	B*	C*	D*	
21	Nickel as Ni	mg/l	ND [DL- 0.01]	3.0	3.0	-	5.0	APHA 23 <sup>rd</sup> Ed.
22	Arsenic as As	mg/l	ND [DL- 0.01]	0.2	0.2	0.2	0.2	APHA 23 <sup>rd</sup> Ed.
23	Sodium as Na	mg/l	25.50	-	-	-	-	APHA 23 <sup>rd</sup> Ed.
24	Potassium as K	mg/l	2.60	-	-	-	-	APHA 23rd Ed.
25	Oil & Grease	mg/l	ND	10	20	10	20	IS:3025 (P-39
26	Total Suspended Solids	mg/l	12	100	600	200	Note-2	IS:3025 (P-17)
27	Dissolved Oxygen as DO	mg/l	6.2	-	-		-	IS:3025 (P-38
28	Biological Oxygen Demand as BOD	mg/l	5	30	350	100	100	IS:3025 (P-44)
29	Chemical Oxygen Demand as COD	mg/l	26	250	-	-	250	IS:3025 (P-58
30	Total Coliform*	MPN/100ml	690	-	-	-	T .	IS 1622





ULR No .:

TC148142500001142F

Post Vikrampur, Distt. Angul-759 106 Odisha, India

Test Report Date:

07/03/2025

Sample Particulars

Nature of the Sample

**Surface Water** 

Sample Quantity & Packaging

1 Liter, Pet Bottle

Sample Received at Lab

28/02/2025

Test Started on

28/02/2025

**Test Completed** 

06/03/2025

Method of Sampling

SOP/B/D-3

Date of Sampling

24/02/2025

Place of Sampling

SW3-River Near PTBS Thermal Area

**Analysis Report** 

Sr. No.	Parameters	Unit	Test Results			Protocol		
			SW3					
				A*	B*	C*	D*	
1	рН	-	7.48	5.5-9.0	5.5-9.0	5.5-9.0	5.5-9.0	IS:3025 (P-11)
2	Color	Hazen	<5	Note-1	Note-1	Note-1	Note-1	IS:3025 (P-4)
3	Turbidity	NTU	<1	-	-	-	-	APHA 23 <sup>rd</sup> Ed
4	Temperature	°C	26.1	Note-5	-	-	Note-5	IS:3025 (P-9)
5	Total Dissolved Solids	mg/l	298	-	-	-	-	IS:3025 (P-16
6	Total Hardness as (CaCO <sub>3</sub> )	mg/l	140	-	-	-	-	IS:3025 (P-21)
7	Total Alkalinity as CaCO <sub>3</sub>	mg/l	94	-	-	-	-	IS:3025 (P-23
8	Chlorides as Cl	mg/l	56	*	*	*		IS:3025(P-32
9	Sulphate as SO <sub>4</sub>	mg/l	25.40	*	*	*	*	APHA 23 <sup>rd</sup> Ed
10	Nitrates as NO <sub>3</sub>	mg/l	0.64	10	-	-	20	IS:3025 (P-34
11	Calcium as Ca	mg/l	36	-	-	-	-	IS:3025 (P-40
12	Magnesium as Mg	mg/l	12.15	-	-	-	-	APHA 23 <sup>rd</sup> Ed
13	Fluoride as F	mg/l	0.12	2.0	15	-	15	IS:3025 (P-60
14	Iron (as Fe)	mg/l	0.32	3.0	3.0	-	3.0	APHA 23rd Ed.
15	Manganese as Mn	mg/l	ND [DL- 0.05]	2.0	2.0	-	2.0	IS:3025 (P-59
16	Total Chromium as Cr	mg/l	ND [DL- 0.05]	2.0	2.0	-	2.0	APHA 23 <sup>rd</sup> Ed
17	Lead as Pb	mg/l	ND [DL- 0.005]	0.1	1.0	-	2.0	APHA 23 <sup>rd</sup> Ed
18	Zinc as Zn	mg/l	0.30	5.0	15	-	15	APHA 23 <sup>rd</sup> Ed
19	Cadmium as Cd	mg/l	ND [DL- 0.001]	2.0	1.0	-	2.0	APHA 23 <sup>rd</sup> Ed.
20	Copper as Cu	mg/l	ND [DL- 0.05]	3.0	3.0	-	3.0	APHA 23rd Ed.



ULR No .:

TC148142500001142F

Post Vikrampur, Distt. Angul-759 106 Odisha, India

Test Report Date:

07/03/2025

**Analysis Report** 

Sr. No.	Parameters	Unit	Test Results SW3		Permissil	5	Protocol	
			3443	A*	B*	C*	D*	
21	Nickel as Ni	mg/l	ND [DL- 0.01]	3.0	3.0	-	5.0	APHA 23 <sup>rd</sup> Ed.
22	Arsenic as As	mg/l	ND [DL- 0.01]	0.2	0.2	0.2	0.2	APHA 23rd Ed.
23	Sodium as Na	mg/l	31.80	-	-		-	APHA 23 <sup>rd</sup> Ed.
24	Potassium as K	mg/l	3.20		-		-	APHA 23rd Ed.
25	Oil & Grease	mg/l	ND	10	20	10	20	IS:3025 (P-39
26	Total Suspended	mg/l	12	100	600	200	Note-2	IS:3025 (P-17
27	Dissolved Oxygen as	mg/l	6.1	-	-	-	-	IS:3025 (P-38
28	Biological Oxygen Demand as BOD	mg/l	4	30	350	100	100	IS:3025 (P-44)
29	Chemical Oxygen Demand as COD	mg/l	20	250	-	-	250	IS:3025 (P-58
30	Total Coliform*	MPN/100ml	300	-	-	-	-	IS 1622





ULR No .:

TC148142500001616F

Post Vikrampur, Distt. Angul-759 106 Odisha, India Test Report Date:

31/03/2025

Sample Particulars

Nature of the Sample

**Ground Water** 

Sample Quantity & Packaging

1 Liter, Pet Bottle

Sample Received at Lab

: 24/03/2025

Test Started on

24/03/2025

Test Completed

29/03/2025

Method of Sampling Date of Sampling SOP/B/D-3 20/03/2025

Place of Sampling

GW1-Tentulei Village

Sr. No.	Parameters	Unit	Test Results GW1	Requirement 1050	Protocol		
			S	Desirable	Permissible	-	
1	pH	-	7.56	6.5-8.5	6.5-8.5	IS:3025 (P-11)	
2	Color	Hazen	<5	5	15	IS:3025 (P-4)	
3	Turbidity	NTU	<1	1	5	APHA 23 <sup>rd</sup> Ed.	
4	Temperature	°C	25.7	-	-	IS:3025 (P-9)	
5	Total Dissolved Solids	mg/l	340	500	2000	IS:3025 (P-16)	
6	Total Hardness as (CaCO <sub>3</sub> )	mg/l	168	200	600	IS:3025 (P-21)	
7	Total Alkalinity as CaCO <sub>3</sub>	mg/l	142	200	600	IS:3025 (P-23)	
8	Chlorides as CI	mg/l	50	250	1000	IS:3025(P-32	
9	Sulphate as SO <sub>4</sub>	mg/l	35.50	200	400	APHA 23 <sup>rd</sup> Ed.	
10	Nitrates as NO <sub>3</sub>	mg/l	0.10	45	No Relaxation	IS:3025 (P-34)	
11	Calcium as Ca	mg/l	42	75	200	IS:3025 (P-40)	
12	Magnesium as Mg	mg/l	15.30	30	100	APHA 23 <sup>rd</sup> Ed.	
13	Fluoride as F	mg/l	ND	1.0	1.5	IS:3025 (P-60)	
14	Iron (as Fe)	mg/l	0.14	0.3	No Relaxation	APHA 23 <sup>rd</sup> Ed.	
15	Manganese as Mn	mg/l	ND	0.1	0.3	IS:3025 (P-59)	
16	Total Chromium as Cr	mg/l	ND	0.05	No Relaxation	APHA 23 <sup>rd</sup> Ed.	
17	Lead as Pb	mg/l	ND	0.01	No Relaxation	APHA 23 <sup>rd</sup> Ed.	
18	Zinc as Zn	mg/l	ND	5	15	APHA 23rd Ed.	



ULR No .:

TC148142500001616F

Post Vikrampur, Distt. Angul-759 106

Test Report Date:

31/03/2025

Odisha, India

Sr. No.	Parameters	Unit	Test Results	Requirem	Protocol	
			GW1	105		
				Desirable	Permissible	
19	Cadmium as Cd	mg/l	ND	0.003	No Relaxation	APHA 23 <sup>rd</sup> Ed.
20	Copper as Cu	mg/l	ND	0.05	1.5	APHA 23 <sup>rd</sup> Ed.
21	Nickel as Ni	mg/l	ND [DL- 0.01]	0.02	No Relaxation	APHA 23 <sup>rd</sup> Ed.
22	Arsenic as As	mg/l	ND [DL- 0.01]	0.01	0.05	APHA 23 <sup>rd</sup> Ed.
23	Sodium as Na	mg/l	32.40	-	-	APHA 23 <sup>rd</sup> Ed.
24	Potassium as K	mg/l	2.10	-	-	APHA 23 <sup>rd</sup> Ed.
25	Oil & Grease	mg/l	ND	-	-	IS:3025 (P-39)
26	Total Suspended Solids	mg/l	ND	-	-	IS:3025 (P-17



Test Report No. :

Post Vikrampur, Distt. Angul-759 106

Test Report Date:

202503200110 31/03/2025

Odisha, India

Sample Particulars

: Ground Water

Nature of the Sample Sample Quantity & Packaging

1 Liter, Pet Bottle

Sample Received at Lab

24/03/2025

Test Started on

24/03/2025

Test Completed

29/03/2025

Method of Sampling

SOP/B/D-3

Date of Sampling

20/03/2025

Place of Sampling

GW1-Tentulei Village

Analysis Report

Sr. No.	Parameters	Unit	Test Results GW1	Requirer IS: 10	Protocol	
				Desirable	Permissible	
1	Taste	-	Agreeable	Agreeable	Agreeable	IS:3025 (P-8)
2	Silica	mg/l	12.60	-	-	APHA 23rd Ed.
3	P Alkalinity as CaCO <sub>3</sub>	mg/l	BDL	-	-	IS:3025 (P-23)
4	Total Coliform*	MPN/100ml	Absent	Absent	Absent	IS 1622
5	Odour		Agreeable	Agreeable	Agreeable	IS:3025 (P-5)

(AUTHORISED SIGNATORY) (RHY HEM BASSON\*)



ULR No .:

TC148142500001617F

Post Vikrampur, Distt. Angul-759 106 Odisha, India

Test Report Date:

31/03/2025

Sample Particulars

Nature of the Sample

**Ground Water** 

Sample Quantity & Packaging

1 Liter, Pet Bottle

Sample Received at Lab

24/03/2025

Test Started on

24/03/2025

Test Completed

29/03/2025

Method of Sampling

SOP/B/D-3

Date of Sampling

20/03/2025

Place of Sampling

GW2-Balanda Village

Sr. No.	Parameters	Unit	Test Results GW2		ent as per IS: 00:2012	Protocol	
			OWZ	Desirable	Permissible	-	
1	pH	-	7.35	6.5-8.5	6.5-8.5	IS:3025 (P-11)	
2	Color	Hazen	<5	5	15	IS:3025 (P-4)	
3	Turbidity	NTU	<1	1	5	APHA 23rd Ed	
4	Temperature	°C	25.7	-	-	IS:3025 (P-9)	
5	Total Dissolved Solids	mg/l	294	500	2000	IS:3025 (P-16	
6	Total Hardness as (CaCO <sub>3</sub> )	mg/l	148	200	600	IS:3025 (P-21	
7	Total Alkalinity as CaCO <sub>3</sub>	mg/l	110	200	600	IS:3025 (P-23	
8	Chlorides as CI	mg/l	60	250	1000	IS:3025(P-32	
9	Sulphate as SO <sub>4</sub>	mg/l	31.60	200	400	APHA 23 <sup>rd</sup> Ed	
10	Nitrates as NO <sub>3</sub>	mg/l	0.14	45	No Relaxation	IS:3025 (P-34	
11	Calcium as Ca	mg/l	34	75	200	IS:3025 (P-40	
12	Magnesium as Mg	mg/l	15.30	30	100	APHA 23 <sup>rd</sup> Ed	
13	Fluoride as F	mg/l	0.13	1.0	1.5	IS:3025 (P-60	
14	Iron (as Fe)	mg/l	0.21	0.3	No Relaxation	APHA 23rd Ed.	
15	Manganese as Mn	mg/l	ND [DL- 0.05]	0.1	0.3	IS:3025 (P-59	
16	Total Chromium as Cr	mg/l	ND [DL- 0.05]	0.05	No Relaxation	APHA 23 <sup>rd</sup> Ed	
17	Lead as Pb	mg/l	ND[DL- 0.005]	0.01	No Relaxation	APHA 23 <sup>rd</sup> Ed	
18	Zinc as Zn	mg/l	0.14	5	15	APHA 23rd Ed	



ULR No .:

TC148142500001617F

Post Vikrampur, Distt. Angul-759 106 Odisha, India Test Report Date:

31/03/2025

Sr. No.	Parameters	Unit	Test Results	Requirem	Protocol	
			GW2	105		
				Desirable	Permissible	-
19	Cadmium as Cd	mg/l	ND	0.003	No Relaxation	APHA 23 <sup>rd</sup> Ed.
20	Copper as Cu	mg/l	ND	0.05	1.5	APHA 23 <sup>rd</sup> Ed.
21	Nickel as Ni	mg/l	ND [DL- 0.01]	0.02	No Relaxation	APHA 23 <sup>rd</sup> Ed.
22	Arsenic as As	mg/l	ND [DL- 0.01]	0.01	0.05	APHA 23 <sup>rd</sup> Ed.
23	Sodium as Na	mg/l	36.90	-	-	APHA 23 <sup>rd</sup> Ed.
24	Potassium as K	mg/l	3.58	-		APHA 23 <sup>rd</sup> Ed.
25	Oil & Grease	mg/l	ND	-	-	IS:3025 (P-39)
26	Total Suspended Solids	mg/l	ND			IS:3025 (P-17)

Test Report No. :

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Post Vikrampur, Distt. Angul-759 106

Test Report Date:

202503200111 31/03/2025

Odisha, India

Sample Particulars

Ground Water

Nature of the Sample Sample Quantity & Packaging

1 Liter, Pet Bottle

Sample Received at Lab

24/03/2025

Test Started on

24/03/2025

Test Completed

29/03/2025

Method of Sampling

SOP/B/D-3

Date of Sampling

20/03/2025

Place of Sampling

GW2-Balanda Village

**Analysis Report** 

Sr. No.	Parameters	Unit	Test Results	Requireme	Protocol	
			GW2	1050		
				Desirable	Permissible	
1	Taste	-	Agreeable	Agreeable	Agreeable	IS:3025 (P-8)
2	Silica	mg/l	10.20	-	-	APHA 23 <sup>rd</sup> Ed
3	P Alkalinity as CaCO <sub>3</sub>	mg/l	BDL	-	-	IS:3025 (P-23
4	Total Coliform*	MPN/100ml	Absent	Absent	Absent	IS 1622
5	Odour		Agreeable	Agreeable	Agreeable	IS:3025 (P-5)

(AUTHORISED SIGNATORY) (RHYTHEM BASSON\*)



ULR No.:

TC148142500001618F

Post Vikrampur, Distt. Angul-759 106 Odisha, India

Test Report Date:

31/03/2025

Sample Particulars

Nature of the Sample

**Ground Water** 

Sample Quantity & Packaging

1 Liter, Pet Bottle

Sample Received at Lab

24/03/2025

Test Started on

**Test Completed** 

24/03/2025

Method of Sampling

29/03/2025

: SOP/B/D-3

Date of Sampling

20/03/2025

Place of Sampling

GW3-Kukudang Village

Sr. No.	Parameters	Unit	Test Results GW3	Requirem 105	Protocol		
				Desirable	Permissible	1	
1	pH	-	7.79	6.5-8.5	6.5-8.5	IS:3025 (P-11)	
2	Color	Hazen	<5	5	15	IS:3025 (P-4)	
3	Turbidity	NTU	<1	1	5	APHA 23 <sup>rd</sup> Ed	
4	Temperature	°C	25.2		-	IS:3025 (P-9)	
5	Total Dissolved Solids	mg/l	308	500	2000	IS:3025 (P-16	
6	Total Hardness as (CaCO <sub>3</sub> )	mg/l	150	200	600	IS:3025 (P-21	
7	Total Alkalinity as CaCO <sub>3</sub>	mg/l	120	200	600	IS:3025 (P-23	
8	Chlorides as CI	mg/l	62	250	1000	IS:3025(P-32	
9	Sulphate as SO <sub>4</sub>	mg/l	32.90	200	400	APHA 23 <sup>rd</sup> Ed	
10	Nitrates as NO <sub>3</sub>	mg/l	0.17	45	No Relaxation	IS:3025 (P-34	
11	Calcium as Ca	mg/l	40	75	200	IS:3025 (P-40	
12	Magnesium as Mg	mg/l	12.15	30	100	APHA 23 <sup>rd</sup> Ed	
13	Fluoride as F	mg/l	0.13	1.0	1.5	IS:3025 (P-60	
14	Iron (as Fe)	mg/l	0.18	0.3	No Relaxation	APHA 23 <sup>rd</sup> Ed	
15	Manganese as Mn	mg/l	ND [DL- 0.05]	0.1	0.3	IS:3025 (P-59)	
16	Total Chromium as Cr	mg/l	ND [DL- 0.05]	0.05	No Relaxation	APHA 23 <sup>rd</sup> Ed	
17	Lead as Pb	mg/l	ND[DL- 0.005]	0.01	No Relaxation	APHA 23 <sup>rd</sup> Ed.	
18	Zinc as Zn	mg/l	0.35	5	15	APHA 23rd Ed.	



ULR No.:

TC148142500001618F

Post Vikrampur, Distt. Angul-759 106 Odisha, India Test Report Date:

31/03/2025

Sr. No.	Parameters	Unit	Test Results	Requirem	Protocol	
			GW3	105		
				Desirable	Permissible	
19	Cadmium as Cd	mg/l	ND	0.003	No Relaxation	APHA 23 <sup>rd</sup> Ed.
20	Copper as Cu	mg/l	ND	0.05	1.5	APHA 23 <sup>rd</sup> Ed.
21	Nickel as Ni	mg/l	ND [DL- 0.01]	0.02	No Relaxation	APHA 23 <sup>rd</sup> Ed.
22	Arsenic as As	mg/l	ND [DL- 0.01]	0.01	0.05	APHA 23 <sup>rd</sup> Ed.
23	Sodium as Na	mg/l	35.10	-	-	APHA 23 <sup>rd</sup> Ed.
24	Potassium as K	mg/l	3.60	-	-	APHA 23 <sup>rd</sup> Ed.
25	Oil & Grease	mg/l	ND	-	-	IS:3025 (P-39)
26	Total Suspended Solids	mg/l	ND	2	-	IS:3025 (P-17)



Test Report No. :

202503200112

Post Vikrampur, Distt. Angul-759 106

Test Report Date:

31/03/2025

Odisha, India

Sample Particulars

: Ground Water

Nature of the Sample Sample Quantity & Packaging

1 Liter, Pet Bottle

Sample Received at Lab

24/03/2025

Test Started on

24/03/2025

Test Completed

29/03/2025

Method of Sampling

SOP/B/D-3

Date of Sampling

20/03/2025

Place of Sampling

GW3-Kukudang Village

**Analysis Report** 

Sr. No.	Parameters	Unit	Unit Test Results		Requirement as per IS:		
			GW3	1050			
				Desirable	Permissible		
1	Taste	-	Agreeable	Agreeable	Agreeable	IS:3025 (P-8)	
2	Silica	mg/l	13.80	-	-	APHA 23rd Ed	
3	P Alkalinity as CaCO <sub>3</sub>	mg/l	BDL	-	-	IS:3025 (P-23	
4	Total Coliform*	MPN/100ml	Absent	Absent	Absent	IS 1622	
5	Odour		Agreeable	Agreeable	Agreeable	IS:3025 (P-5)	

(AUTHORISED SIGNATORY) (RHYTHEM BASSON\*)



Odisha, India

ULR No .:

TC148142500001619F

Post Vikrampur, Distt. Angul-759 106

Test Report Date:

31/03/2025

Sample Particulars

Nature of the Sample

Surface Water

Sample Quantity & Packaging

1 Liter, Pet Bottle

Sample Received at Lab

24/03/2025

Test Started on

: 24/03/2025

Test Completed Method of Sampling : 29/03/2025

Date of Sampling

: SOP/B/D-3 20/03/2025

Place of Sampling

SW1-Pump House

**Analysis Report** 

Sr. No.	Parameters	Unit	Test Results		Permissil	ble Limits		Protocol	
NO.			SW1						
				A*	B*	C*	D*	1	
1	pH	-	7.28	5.5-9.0	5.5-9.0	5.5-9.0	5.5-9.0	IS:3025 (P-11)	
2	Color	Hazen	<5	Note-1	Note-1	Note-1	Note-1	IS:3025 (P-4)	
3	Turbidity	NTU	<1	-	-	-	-	APHA 23 <sup>rd</sup> Ed	
4	Temperature	°C	25.8	Note-5	-	-	Note-5	IS:3025 (P-9)	
5	Total Dissolved Solids	mg/l	324	-	-	-	-	IS:3025 (P-16	
6	Total Hardness as (CaCO <sub>3</sub> )	mg/l	160	-	-	-	-	IS:3025 (P-21	
7	Total Alkalinity as CaCO <sub>3</sub>	mg/l	120	-	-	-	-	IS:3025 (P-23	
8	Chlorides as CI	mg/l	42			*	*	IS:3025(P-32	
9	Sulphate as SO <sub>4</sub>	mg/l	25.80	*	*			APHA 23 <sup>rd</sup> Ed	
10	Nitrates as NO <sub>3</sub>	mg/l	0.18	10	-	-	20	IS:3025 (P-34	
11	Calcium as Ca	mg/l	44	-		-	-	IS:3025 (P-40	
12	Magnesium as Mg	mg/l	12.15	-	-	-	-	APHA 23 <sup>rd</sup> Ed	
13	Fluoride as F	mg/l	0.13	2.0	15	-	15	IS:3025 (P-60	
14	Iron (as Fe)	mg/l	0.21	3.0	3.0	-	3.0	APHA 23 <sup>rd</sup> Ed.	
15	Manganese as Mn	mg/l	ND [DL- 0.05]	2.0	2.0	-	2.0	IS:3025 (P-59	
16	Total Chromium as Cr	mg/l	ND [DL- 0.05]	2.0	2.0	-	2.0	APHA 23 <sup>rd</sup> Ed	
17	Lead as Pb	mg/l	ND[DL- 0.005]	0.1	1.0	-	2.0	APHA 23 <sup>rd</sup> Ed.	
18	Zinc as Zn	mg/l	0.20	5.0	15	-	15	APHA 23 <sup>rd</sup> Ed.	
19	Cadmium as Cd	mg/l	ND [DL- 0.001]	2.0	1.0	-	2.0	APHA 23 <sup>rd</sup> Ed.	
20	Copper as Cu	mg/l	ND [DL- 0.05]	3.0	3.0	-	3.0	APHA 23 <sup>rd</sup> Ed.	



Issued To

M/s Talcher Fertilizers Limited

ULR No .:

TC148142500001619F

Post Vikrampur, Distt. Angul-759 106 Odisha, India

Test Report Date:

31/03/2025

# **Analysis Report**

Sr. No.	Parameters	Unit	Test Results		Protocol			
			SW1	A*	B*	C*	D*	
				^	В	C	D	
21	Nickel as Ni	mg/l	ND [DL- 0.01]	3.0	3.0	-	5.0	APHA 23rd Ed.
22	Arsenic as As	mg/l	ND [DL- 0.01]	0.2	0.2	0.2	0.2	APHA 23rd Ed.
23	Sodium as Na	mg/l	29.80	-	-		-	APHA 23rd Ed.
24	Potassium as K	mg/l	3.20	-	-	-	-	APHA 23 <sup>rd</sup> Ed.
25	Oil & Grease	mg/l	ND	10	20	10	20	IS:3025 (P-39)
26	Total Suspended	mg/l	18	100	600	200	Note-2	IS:3025 (P-17)
27	Dissolved Oxygen as	mg/l	6.1	-	-	-	-	IS:3025 (P-38)
28	Biological Oxygen Demand as BOD	mg/l	5	30	350	100	100	IS:3025 (P-44)
29	Chemical Oxygen Demand as COD	mg/l	26	250	-	-	250	IS:3025 (P-58)
30	Total Coliform*	MPN/100ml	542	-	-	-		IS 1622

Remark:
ND-Not Detected, DL-Detection Limit, A\*- Inland Surface Water, B\*-Public Sewer, C\*-Land for Irrigation, D\*-Marine Coastal Areas

(AUTHORISED SIGNATORY) (RHYTHEM BASSON\*)



ULR No .:

TC148142500001620F

Post Vikrampur, Distt. Angul-759 106 Odisha, India

Test Report Date:

31/03/2025

Sample Particulars

Nature of the Sample

Surface Water

Sample Quantity & Packaging Sample Received at Lab

1 Liter, Pet Bottle 24/03/2025

Test Started on

24/03/2025

Test Completed

Method of Sampling

Date of Sampling

29/03/2025 SOP/B/D-3

Place of Sampling

: 20/03/2025: SW2-River Near Jatia Bridge

Analysis Report

Sr. No. **Parameters** Unit **Test Results** Permissible Limits Protocol SW2 **A**\* B\* C\* D\* pH 1 7.59 IS:3025 (P-11) 5.5-9.0 5.5-9.0 5.5-9.0 5.5-9.0 2 Color Hazen <5 IS:3025 (P-4) Note-1 Note-1 Note-1 Note-1 3 Turbidity NTU <1 APHA 23rd Ed. 4 Temperature OC. 25.6 IS:3025 (P-9) Note-5 Note-5 5 **Total Dissolved Solids** 364 mg/l IS:3025 (P-16) . 6 Total Hardness as (CaCO<sub>3</sub>) mg/l 170 IS:3025 (P-21) 7 Total Alkalinity as CaCO<sub>3</sub> mg/l 150 IS:3025 (P-23) Chlorides as Cl 8 mg/l 72 IS:3025(P-32 Sulphate as SO<sub>4</sub> 9 30.40 mg/l APHA 23rd Ed. Nitrates as NO<sub>3</sub> 10 mg/l 0.68 10 IS:3025 (P-34) 20 Calcium as Ca 11 mg/l 48 IS:3025 (P-40) Magnesium as Mg 12 mg/l APHA 23rd Ed. 12.15 Fluoride as F 13 mg/l 0.18 IS:3025 (P-60) 2.0 15 15 Iron (as Fe) 14 mg/l 0.26 APHA 23rd Ed. 3.0 3.0 3.0 15 Manganese as Mn mg/l ND [DL- 0.05] IS:3025 (P-59) 2.0 2.0 2.0 Total Chromium as Cr 16 ND [DL- 0.05] mg/l APHA 23rd Ed. 2.0 2.0 2.0 17 Lead as Pb mg/l ND [DL- 0.005] APHA 23rd Ed. 0.1 1.0 2.0 Zinc as Zn 18 0.26 mg/l APHA 23rd Ed. 5.0 15 15 Cadmium as Cd 19 mg/l ND [DL- 0.001] APHA 23rd Ed. 2.0 1.0 2.0 Copper as Cu 20 mg/l ND [DL- 0.05] APHA 23rd Ed. 3.0 3.0 3.0

Remark:



Issued To

M/s Talcher Fertilizers Limited

ULR No .:

TC148142500001620F

Post Vikrampur, Distt. Angul-759 106 Odisha, India

Test Report Date:

31/03/2025

## **Analysis Report**

Sr. No.	Parameters	Unit	Test Results		Protocol			
			SW2					
				A*	B*	C*	D*	
21	Nickel as Ni	mg/l	ND [DL- 0.01]	3.0	3.0	-	5.0	APHA 23 <sup>rd</sup> Ed
22	Arsenic as As	mg/l	ND [DL- 0.01]	0.2	0.2	0.2	0.2	APHA 23rd Ed
23	Sodium as Na	mg/l	27.90	-	-	-	-	APHA 23rd Ed
24	Potassium as K	mg/l	2.80		-	-	-	APHA 23 <sup>rd</sup> Ec
25	Oil & Grease	mg/l	ND	10	20	10	20	IS:3025 (P-39
26	Total Suspended Solids	mg/l	20	100	600	200	Note-2	IS:3025 (P-17
27	Dissolved Oxygen as DO	mg/l	6.4	-	-	-	-	IS:3025 (P-38
28	Biological Oxygen Demand as BOD	mg/l	4	30	350	100	100	IS:3025 (P-44
29	Chemical Oxygen Demand as COD	mg/l	20	250	-	-	250	IS:3025 (P-58
30	Total Coliform*	MPN/100ml	698	-	-	-	-	IS 1622





ULR No .:

TC148142500001621F

Post Vikrampur, Distt. Angul-759 106 Odisha, India

Test Report Date:

31/03/2025

Sample Particulars

Nature of the Sample

**Surface Water** 

Sample Quantity & Packaging

1 Liter, Pet Bottle

Sample Received at Lab

: 24/03/2025

Test Started on

: 24/03/2025

**Test Completed** 

29/03/2025

Method of Sampling

: SOP/B/D-3

Date of Sampling

20/03/2025

Place of Sampling

SW3-River Near PTBS Thermal Area

**Analysis Report** 

Sr. No.	Parameters	Unit	Test Results		Permissi	ble Limits		Protocol	
NO.			SW3						
				A*	B*	C*	D*		
1	pH	-	7.56	5.5-9.0	5.5-9.0	5.5-9.0	5.5-9.0	IS:3025 (P-11)	
2	Color	Hazen	<5	Note-1	Note-1	Note-1	Note-1	IS:3025 (P-4)	
3	Turbidity	NTU	<1	-		-	-	APHA 23 <sup>rd</sup> Ed.	
4	Temperature	°C	26.3	Note-5	-	-	Note-5	IS:3025 (P-9)	
5	Total Dissolved Solids	mg/l	284	-	-	-	-	IS:3025 (P-16)	
6	Total Hardness as (CaCO <sub>3</sub> )	mg/l	126	-	-	-		IS:3025 (P-21)	
7	Total Alkalinity as CaCO <sub>3</sub>	mg/l	90	-	-	-	-	IS:3025 (P-23)	
8	Chlorides as CI	mg/l	42	*		*	*	IS:3025(P-32	
9	Sulphate as SO <sub>4</sub>	mg/l	23.30	*	*	*	*	APHA 23 <sup>rd</sup> Ed	
10	Nitrates as NO <sub>3</sub>	mg/l	0.52	10	-	-	20	IS:3025 (P-34	
11	Calcium as Ca	mg/l	30	-	-	-	-	IS:3025 (P-40	
12	Magnesium as Mg	mg/l	12.39	-	-	-	-	APHA 23 <sup>rd</sup> Ed	
13	Fluoride as F	mg/l	0.17	2.0	15	-	15	IS:3025 (P-60)	
14	Iron (as Fe)	mg/l	0.25	3.0	3.0	-	3.0	APHA 23 <sup>rd</sup> Ed.	
15	Manganese as Mn	mg/l	ND [DL- 0.05]	2.0	2.0	-	2.0	IS:3025 (P-59	
16	Total Chromium as Cr	mg/l	ND [DL- 0.05]	2.0	2.0	-	2.0	APHA 23 <sup>rd</sup> Ed.	
17	Lead as Pb	mg/l	ND [DL- 0.005]	0.1	1.0	-	2.0	APHA 23 <sup>rd</sup> Ed.	
18	Zinc as Zn	mg/l	0.25	5.0	15	-	15	APHA 23 <sup>rd</sup> Ed.	
19	Cadmium as Cd	mg/l	ND [DL- 0.001]	2.0	1.0	-	2.0	APHA 23 <sup>rd</sup> Ed.	
20	Copper as Cu	mg/l	ND [DL- 0.05]	3.0	3.0	-	3.0	APHA 23 <sup>rd</sup> Ed.	



ULR No .:

TC148142500001621F

Post Vikrampur, Distt. Angul-759 106 Odisha, India

Test Report Date:

31/03/2025

**Analysis Report** 

Sr. No.	Parameters	Unit	Test Results SW3		Permissil	Protocol		
				A*	B*	C*	D*	
21	Nickel as Ni	mg/l	ND [DL- 0.01]	3.0	3.0	-	5.0	APHA 23rd Ed.
22	Arsenic as As	mg/l	ND [DL- 0.01]	0.2	0.2	0.2	0.2	APHA 23 <sup>rd</sup> Ed.
23	Sodium as Na	mg/l	28.90	-	-	-	-	APHA 23 <sup>rd</sup> Ed.
24	Potassium as K	mg/l	2.92	-	-		-	APHA 23 <sup>rd</sup> Ed.
25	Oil & Grease	mg/l	ND	10	20	10	20	IS:3025 (P-39
26	Total Suspended	mg/l	16	100	600	200	Note-2	IS:3025 (P-17
27	Dissolved Oxygen as	mg/l	5.9	-	-		-	IS:3025 (P-38
28	Biological Oxygen Demand as BOD	mg/l	5	30	350	100	100	IS:3025 (P-44
29	Chemical Oxygen Demand as COD	mg/l	24	250	-	-	250	IS:3025 (P-58
30	Total Coliform*	MPN/100ml	503	-	-	-	-	IS 1622





ULR No .:

TC148142500002502F

Post Vikrampur, Distt. Angul-759 106 Odisha, India Test Report Date:

01/05/2025

Sample Particulars

Nature of the Sample

**Ground Water** 

Sample Quantity & Packaging

1 Liter, Pet Bottle

Sample Received at Lab

25/04/2025

Test Started on

25/04/2025

**Test Completed** 

: 30/04/2025

Test Completed

: SOP/B/D-3

Method of Sampling Date of Sampling

21/04/2025

Place of Sampling

: GW1-Tentulei Village

indo of Gampinig

Sr. No.	Parameters	Unit	Test Results GW1	Requirem 1050	Protocol	
				Desirable	Permissible	1
1	pH	-	7.64	6.5-8.5	6.5-8.5	IS:3025 (P-11)
2	Color	Hazen	<5	5	15	IS:3025 (P-4)
3	Turbidity	NTU	<1	1	5	APHA 23 <sup>rd</sup> Ed.
4	Temperature	°C	25.9	-	-	IS:3025 (P-9)
5	Total Dissolved Solids	mg/l	380	500	2000	IS:3025 (P-16)
6	Total Hardness as (CaCO <sub>3</sub> )	mg/l	178	200	600	IS:3025 (P-21)
7	Total Alkalinity as CaCO <sub>3</sub>	mg/l	136	200	600	IS:3025 (P-23)
8	Chlorides as CI	mg/l	46	250	1000	IS:3025(P-32
9	Sulphate as SO <sub>4</sub>	mg/l	32.20	200	400	APHA 23 <sup>rd</sup> Ed.
10	Nitrates as NO <sub>3</sub>	mg/l	0.15	45	No Relaxation	IS:3025 (P-34)
11	Calcium as Ca	mg/l	38	75	200	IS:3025 (P-40)
12	Magnesium as Mg	mg/l	20.16	30	100	APHA 23 <sup>rd</sup> Ed.
13	Fluoride as F	mg/l	ND	1.0	1.5	IS:3025 (P-60)
14	Iron (as Fe)	mg/l	0.18	0.3	No Relaxation	APHA 23 <sup>rd</sup> Ed.
15	Manganese as Mn	mg/l	ND	0.1	0.3	IS:3025 (P-59)
16	Total Chromium as Cr	mg/l	ND	0.05	No Relaxation	APHA 23rd Ed.
17	Lead as Pb	mg/l	ND	0.01	No Relaxation	APHA 23 <sup>rd</sup> Ed.
18	Zinc as Zn	mg/l	ND	5	15	APHA 23 <sup>rd</sup> Ed.



ULR No.:

TC148142500002502F

Post Vikrampur, Distt. Angul-759 106

Test Report Date:

01/05/2025

Odisha, India

Sr. No.	Parameters	Unit	Test Results	Requirem	Protocol	
			GW1	105		
				Desirable	Permissible	
19	Cadmium as Cd	mg/l	ND	0.003	No Relaxation	APHA 23 <sup>rd</sup> Ed
20	Copper as Cu	mg/l	ND	0.05	1.5	APHA 23 <sup>rd</sup> Ed
21	Nickel as Ni	mg/l	ND [DL- 0.01]	0.02	No Relaxation	APHA 23 <sup>rd</sup> Ed
22	Arsenic as As	mg/l	ND [DL- 0.01]	0.01	0.05	APHA 23 <sup>rd</sup> Ed
23	Sodium as Na	mg/l	30.50	-	-	APHA 23 <sup>rd</sup> Ed
24	Potassium as K	mg/l	2.72	-	-	APHA 23 <sup>rd</sup> Ed
25	Oil & Grease	mg/l	ND	-		IS:3025 (P-39
26	Total Suspended Solids	mg/l	ND		-	IS:3025 (P-17



Odisha, India

Test Report No. :

202503200110

Post Vikrampur, Distt. Angul-759 106

Test Report Date:

31/03/2025

Sample Particulars

Nature of the Sample

**Ground Water** 

Sample Quantity & Packaging

: 1 Liter, Pet Bottle

Sample Received at Lab

: 25/04/2025

Test Started on

: 25/04/2025

Test Completed

30/04/2025

Method of Sampling

: SOP/B/D-3

Date of Sampling

: 21/04/2025

Place of Sampling

GW1-Tentulei Village

**Analysis Report** 

Sr. No.	Parameters	Unit	Test Results	Requirer	Protocol	
			GW1	IS: 10		
				Desirable	Permissible	
1	Taste		Agreeable	Agreeable	Agreeable	IS:3025 (P-8)
2	Silica	mg/l	10.40	-	-	APHA 23 <sup>rd</sup> Ed.
3	P Alkalinity as CaCO <sub>3</sub>	mg/l	BDL	-	-	IS:3025 (P-23)
4	Total Coliform*	MPN/100ml	Absent	Absent	Absent	IS 1622
5	Odour		Agreeable	Agreeable	Agreeable	IS:3025 (P-5)

(AUTHORISED SIGNATORY)
(DHANU PRIYA")

Nitya Laboratories



ULR No .:

TC148142500002503F

Post Vikrampur, Distt. Angul-759 106 Odisha, India

Test Report Date:

01/05/2025

Sample Particulars

Nature of the Sample

: Ground Water

Sample Quantity & Packaging

: 1 Liter, Pet Bottle

Sample Received at Lab

25/04/2025

Test Started on

**Test Completed** 

: 25/04/2025 : 30/04/2025

Method of Sampling

: SOP/B/D-3

Date of Sampling

: 21/04/2025

Place of Sampling

: GW2-Balanda Village

Sr. No.	Parameters	Unit	Test Results GW2		ent as per IS: 00:2012	Protocol
				Desirable	Permissible	1
1	pH	-	7.26	6.5-8.5	6.5-8.5	IS:3025 (P-11)
2	Color	Hazen	<5	5	15	IS:3025 (P-4)
3	Turbidity	NTU	<1	1	5	APHA 23rd Ed
4	Temperature	°C	25.9	-	-	IS:3025 (P-9)
5	Total Dissolved Solids	mg/l	320	500	2000	IS:3025 (P-16
6	Total Hardness as (CaCO <sub>3</sub> )	mg/l	156	200	600	IS:3025 (P-21
7	Total Alkalinity as CaCO <sub>3</sub>	mg/l	120	200	600	IS:3025 (P-23
8	Chlorides as CI	mg/l	56	250	1000	IS:3025(P-32
9	Sulphate as SO <sub>4</sub>	mg/l	35.20	200	400	APHA 23 <sup>rd</sup> Ed
10	Nitrates as NO <sub>3</sub>	mg/l	0.20	45	No Relaxation	IS:3025 (P-34
11	Calcium as Ca	mg/l	38	75	200	IS:3025 (P-40
12	Magnesium as Mg	mg/l	14.82	30	100	APHA 23 <sup>rd</sup> Ed
13	Fluoride as F	mg/l	0.10	1.0	1.5	IS:3025 (P-60
14	Iron (as Fe)	mg/l	0.32	0.3	No Relaxation	APHA 23 <sup>rd</sup> Ed.
15	Manganese as Mn	mg/l	ND [DL- 0.05]	0.1	0.3	IS:3025 (P-59
16	Total Chromium as Cr	mg/l	ND [DL- 0.05]	0.05	No Relaxation	APHA 23 <sup>rd</sup> Ed.
17	Lead as Pb	mg/l	ND[DL- 0.005]	0.01	No Relaxation	APHA 23 <sup>rd</sup> Ed.
18	Zinc as Zn	mg/l	0.24	5	15	APHA 23rd Ed.



ULR No .:

TC148142500002503F

Post Vikrampur, Distt. Angul-759 106 Odisha, India Test Report Date:

01/05/2025

Sr. No.	Parameters	Unit	Test Results	Requirem	Protocol	
			GW2	105		
				Desirable	Permissible	
19	Cadmium as Cd	mg/l	ND	0.003	No Relaxation	APHA 23 <sup>rd</sup> Ed.
20	Copper as Cu	mg/l	ND	0.05	1.5	APHA 23 <sup>rd</sup> Ed.
21	Nickel as Ni	mg/l	ND [DL- 0.01]	0.02	No Relaxation	APHA 23 <sup>rd</sup> Ed.
22	Arsenic as As	mg/l	ND [DL- 0.01]	0.01	0.05	APHA 23 <sup>rd</sup> Ed.
23	Sodium as Na	mg/l	34.20	-	-	APHA 23 <sup>rd</sup> Ed.
24	Potassium as K	mg/l	3.30	-	-	APHA 23 <sup>rd</sup> Ed.
25	Oil & Grease	mg/l	ND	-	-	IS:3025 (P-39)
26	Total Suspended Solids	mg/l	ND		-	IS:3025 (P-17)



Test Report No. :

202503200111

Post Vikrampur, Distt. Angul-759 106 Odisha, India

Test Report Date:

31/03/2025

Sample Particulars

Nature of the Sample

**Ground Water** 

Sample Quantity & Packaging

1 Liter, Pet Bottle

Sample Received at Lab

25/04/2025

Test Started on

**Test Completed** 

25/04/2025 30/04/2025

Method of Sampling

SOP/B/D-3

Date of Sampling

: 21/04/2025

Place of Sampling

: GW2-Balanda Village

Sr. No.	Parameters	Unit	Test Results	Requireme	Protocol	
			GW2	1050		
				Desirable	Permissible	
1	Taste	-	Agreeable	Agreeable	Agreeable	IS:3025 (P-8)
2	Silica	mg/l	11.90	-	-	APHA 23rd Ed.
3	P Alkalinity as CaCO <sub>3</sub>	mg/l	BDL	-	-	IS:3025 (P-23)
4	Total Coliform*	MPN/100ml	Absent	Absent	Absent	IS 1622
5	Odour		Agreeable	Agreeable	Agreeable	IS:3025 (P-5)

ULR No .:

TC148142500002504F

Post Vikrampur, Distt. Angul-759 106 Odisha, India Test Report Date:

01/05/2025

Sample Particulars

Nature of the Sample

**Ground Water** 

Sample Quantity & Packaging

1 Liter, Pet Bottle

Sample Received at Lab

25/04/2025

Test Started on

25/04/2025

Test Completed

30/04/2025

Method of Sampling

SOP/B/D-3

Date of Sampling

21/04/2025

Place of Sampling

GW3-Kukudang Village

Sr. No.	Parameters	Unit	Test Results GW3		ent as per IS: 00:2012	Protocol
			3.10	Desirable	Permissible	1
1	pH	-	7.84	6.5-8.5	6.5-8.5	IS:3025 (P-11)
2	Color	Hazen	<5	5	15	IS:3025 (P-4)
3	Turbidity	NTU	<1	1	5	APHA 23rd Ed.
4	Temperature	°C	25.5	-	-	IS:3025 (P-9)
5	Total Dissolved Solids	mg/l	324	500	2000	IS:3025 (P-16
6	Total Hardness as (CaCO <sub>3</sub> )	mg/l	162	200	600	IS:3025 (P-21
7	Total Alkalinity as CaCO <sub>3</sub>	mg/l	118	200	600	IS:3025 (P-23
8	Chlorides as CI	mg/l	56	250	1000	IS:3025(P-32
9	Sulphate as SO <sub>4</sub>	mg/l	26.60	200	400	APHA 23 <sup>rd</sup> Ed
10	Nitrates as NO <sub>3</sub>	mg/l	0.15	45	No Relaxation	IS:3025 (P-34
11	Calcium as Ca	mg/l	44	75	200	IS:3025 (P-40
12	Magnesium as Mg	mg/l	12.63	30	100	APHA 23 <sup>rd</sup> Ed
13	Fluoride as F	mg/l	0.18	1.0	1.5	IS:3025 (P-60)
14	Iron (as Fe)	mg/l	0.20	0.3	No Relaxation	APHA 23 <sup>rd</sup> Ed.
15	Manganese as Mn	mg/l	ND [DL- 0.05]	0.1	0.3	IS:3025 (P-59)
16	Total Chromium as Cr	mg/l	ND [DL- 0.05]	0.05	No Relaxation	APHA 23 <sup>rd</sup> Ed.
17	Lead as Pb	mg/l	ND[DL- 0.005]	0.01	No Relaxation	APHA 23 <sup>rd</sup> Ed.
18	Zinc as Zn	mg/l	0.26	5	15	APHA 23rd Ed.



ULR No.:

TC148142500002504F

Post Vikrampur, Distt. Angul-759 106 Odisha, India Test Report Date:

01/05/2025

Sr. No.	Parameters	Unit	Test Results	Requirem	Protocol	
			GW3	105		
				Desirable	Permissible	
19	Cadmium as Cd	mg/l	ND	0.003	No Relaxation	APHA 23 <sup>rd</sup> Ed.
20	Copper as Cu	mg/l	ND	0.05	1.5	APHA 23rd Ed.
21	Nickel as Ni	mg/l	ND [DL- 0.01]	0.02	No Relaxation	APHA 23 <sup>rd</sup> Ed.
22	Arsenic as As	mg/l	ND [DL- 0.01]	0.01	0.05	APHA 23 <sup>rd</sup> Ed.
23	Sodium as Na	mg/l	31.60	-	-	APHA 23 <sup>rd</sup> Ed.
24	Potassium as K	mg/l	3.40	-	-	APHA 23 <sup>rd</sup> Ed.
25	Oil & Grease	mg/l	ND	-	-	IS:3025 (P-39)
26	Total Suspended Solids	mg/l	ND	-	-	IS:3025 (P-17)



Odisha, India

Test Report No. :

Post Vikrampur, Distt. Angul-759 106

Test Report Date:

202503200112 31/03/2025

Sample Particulars

Nature of the Sample

**Ground Water** 

Sample Quantity & Packaging

1 Liter, Pet Bottle

Sample Received at Lab

25/04/2025

Test Started on

2010112020

Test Completed

25/04/2025

30/04/2025

Method of Sampling

SOP/B/D-3

Date of Sampling

21/04/2025

Place of Sampling

GW3-Kukudang Village

**Analysis Report** 

Sr. No.	Parameters	Unit	Test Results	Requireme 1050	Protocol	
			GW3	Desirable	4	
				Desirable	Permissible	
1	Taste	-	Agreeable	Agreeable	Agreeable	IS:3025 (P-8)
2	Silica	mg/l	12.30	-	-	APHA 23rd Ed
3	P Alkalinity as CaCO <sub>3</sub>	mg/l	BDL	-	-	IS:3025 (P-23
4	Total Coliform*	MPN/100ml	Absent	Absent	Absent	IS 1622
5	Odour	1	Agreeable	Agreeable	Agreeable	IS:3025 (P-5)

(AUTHORISED SIGNATORY)



ULR No .:

TC148142500002505F

Post Vikrampur, Distt. Angul-759 106 Odisha, India

Test Report Date:

01/05/2025

Sample Particulars

Nature of the Sample

Surface Water

Sample Quantity & Packaging Sample Received at Lab

1 Liter, Pet Bottle 25/04/2025

Test Started on

25/04/2025

**Test Completed** Method of Sampling 30/04/2025 SOP/B/D-3

Date of Sampling

21/04/2025

Place of Sampling

SW1-Pump House

**Analysis Report** 

Sr. No.	Parameters	Unit	Test Results		Permissi	ble Limits		Protocol	
NO.			SW1						
				A*	B*	C*	D*		
1	pH	-	7.39	5.5-9.0	5.5-9.0	5.5-9.0	5.5-9.0	IS:3025 (P-11)	
2	Color	Hazen	<5	Note-1	Note-1	Note-1	Note-1	IS:3025 (P-4)	
3	Turbidity	NTU	<1	-		-	-	APHA 23 <sup>rd</sup> Ed.	
4	Temperature	°C	25.3	Note-5	-	-	Note-5	IS:3025 (P-9)	
5	Total Dissolved Solids	mg/l	352	-	-	-	-	IS:3025 (P-16)	
6	Total Hardness as (CaCO <sub>3</sub> )	mg/l	176	-	-	-	-	IS:3025 (P-21)	
7	Total Alkalinity as CaCO <sub>3</sub>	mg/l	132	-	-	-		IS:3025 (P-23	
8	Chlorides as Cl	mg/l	50		*	*	*	IS:3025(P-32	
9	Sulphate as SO <sub>4</sub>	mg/l	22.50		*	*	*	APHA 23 <sup>rd</sup> Ed	
10	Nitrates as NO <sub>3</sub>	mg/l	0.12	10	-	-	20	IS:3025 (P-34	
11	Calcium as Ca	mg/l	40	-	-	-	-	IS:3025 (P-40	
12	Magnesium as Mg	mg/l	18.46	-	-	-	-	APHA 23 <sup>rd</sup> Ed	
13	Fluoride as F	mg/l	0.11	2.0	15	-	15	IS:3025 (P-60	
14	Iron (as Fe)	mg/l	0.18	3.0	3.0	-	3.0	APHA 23 <sup>rd</sup> Ed	
15	Manganese as Mn	mg/l	ND [DL- 0.05]	2.0	2.0	-	2.0	IS:3025 (P-59	
16	Total Chromium as Cr	mg/l	ND [DL- 0.05]	2.0	2.0	-	2.0	APHA 23rd Ed.	
17	Lead as Pb	mg/l	ND[DL- 0.005]	0.1	1.0	-	2.0	APHA 23 <sup>rd</sup> Ed.	
18	Zinc as Zn	mg/l	0.32	5.0	15	-	15	APHA 23 <sup>rd</sup> Ed.	
19	Cadmium as Cd	mg/l	ND [DL- 0.001]	2.0	1.0	-	2.0	APHA 23 <sup>rd</sup> Ed.	
20	Copper as Cu	mg/l	ND [DL- 0.05]	3.0	3.0	-	3.0	APHA 23rd Ed.	



ULR No .:

TC148142500002505F

Post Vikrampur, Distt. Angul-759 106 Odisha, India

Test Report Date:

01/05/2025

Analysis Report

Sr.	Parameters	Unit	Test Results		Permissi	ble Limits	3	Protocol	
No.			SW1						
				A*	B*	C*	D*		
21	Nickel as Ni	mg/l	ND [DL- 0.01]	3.0	3.0	-	5.0	APHA 23 <sup>rd</sup> Ed.	
22	Arsenic as As	mg/l	ND [DL- 0.01]	0.2	0.2	0.2	0.2	APHA 23rd Ed.	
23	Sodium as Na	mg/l	27.20	-	-		-	APHA 23rd Ed.	
24	Potassium as K	mg/l	2.80	-	-		-	APHA 23rd Ed.	
25	Oil & Grease	mg/l	ND	10	20	10	20	IS:3025 (P-39)	
26	Total Suspended	mg/l	24	100	600	200	Note-2	IS:3025 (P-17)	
27	Dissolved Oxygen as	mg/l	6.3	_	-	-	-	IS:3025 (P-38)	
28	Biological Oxygen Demand as BOD	mg/l	4	30	350	100	100	IS:3025 (P-44)	
29	Chemical Oxygen Demand as COD	mg/l	20	250	-	-	250	IS:3025 (P-58)	



Test Report No.:

202503200113

Post Vikrampur, Distt. Angul-759 106

Test Report Date:

01/05/2025

Odisha, India

Sample Particulars

Nature of the Sample

Surface Water

Sample Quantity & Packaging

1 Liter, Pet Bottle

Sample Received at Lab

25/04/2025

Test Started on

25/04/2025

Test Completed

30/04/2025

Method of Sampling

SOP/B/D-3

Date of Sampling

21/04/2025

Place of Sampling

SW1-Pump House

**Analysis Report** 

Sr. P.	Parameters	Unit	Test Results SW1		Protocol			
				A*	B*	C*	D*	1
1	Total Coliform*	MPN/100ml	500	-	-	-	-	IS 1622

(AUTHORISED SIGNATORY)

Authorised III

ULR No .:

TC148142500002506F

Post Vikrampur, Distt. Angul-759 106 Odisha, India

Test Report Date:

01/05/2025

Sample Particulars

Nature of the Sample

Surface Water

Sample Quantity & Packaging

1 Liter, Pet Bottle

Sample Received at Lab

25/04/2025

Test Started on

25/04/2025

**Test Completed** 

30/04/2025

Method of Sampling

SOP/B/D-3

Date of Sampling Place of Sampling : 21/04/2025 : SW2-River Near Jatia Bridge

**Analysis Report** 

Sr. No.	Parameters	Unit	Test Results		Permissil	ole Limits		Protocol	
			SW2						
				A*	B*	C*	D*		
1	pH	-	7.68	5.5-9.0	5.5-9.0	5.5-9.0	5.5-9.0	IS:3025 (P-11)	
2	Color	Hazen	<5	Note-1	Note-1	Note-1	Note-1	IS:3025 (P-4)	
3	Turbidity	NTU	<1	-	-	-	-	APHA 23rd Ed.	
4	Temperature	°C	25.8	Note-5	-	-	Note-5	IS:3025 (P-9)	
5	Total Dissolved Solids	mg/l	386	-	-	-	-	IS:3025 (P-16)	
6	Total Hardness as (CaCO <sub>3</sub> )	mg/l	184	-	-	177	-	IS:3025 (P-21	
7	Total Alkalinity as CaCO <sub>3</sub>	mg/l	146	-	-	-	-	IS:3025 (P-23	
8	Chlorides as Cl	mg/l	64	*				IS:3025(P-32	
9	Sulphate as SO <sub>4</sub>	mg/l	28.20	*	*	*	*	APHA 23 <sup>rd</sup> Ed	
10	Nitrates as NO <sub>3</sub>	mg/l	0.50	10	-	-	20	IS:3025 (P-34	
11	Calcium as Ca	mg/l	42	-	-	-	-	IS:3025 (P-40	
12	Magnesium as Mg	mg/l	19.19	-	-	-	-	APHA 23 <sup>rd</sup> Ed	
13	Fluoride as F	mg/l	0.10	2.0	15	-	15	IS:3025 (P-60	
14	Iron (as Fe)	mg/l	0.22	3.0	3.0	-	3.0	APHA 23 <sup>rd</sup> Ed	
15	Manganese as Mn	mg/l	ND [DL- 0.05]	2.0	2.0	-	2.0	IS:3025 (P-59	
16	Total Chromium as Cr	mg/l	ND [DL- 0.05]	2.0	2.0	-	2.0	APHA 23rd Ed	
17	Lead as Pb	mg/l	ND [DL- 0.005]	0.1	1.0	-	2.0	APHA 23rd Ed	
18	Zinc as Zn	mg/l	0.38	5.0	15	-	15	APHA 23rd Ed	
19	Cadmium as Cd	mg/l	ND [DL- 0.001]	2.0	1.0	-	2.0	APHA 23rd Ed	
20	Copper as Cu	mg/l	ND [DL- 0.05]	3.0	3.0	-	3.0	APHA 23rd Ed	



ULR No .:

TC148142500002506F

Post Vikrampur, Distt. Angul-759 106

Test Report Date:

01/05/2025

Odisha, India **Analysis Report** 

Sr. No.	Parameters	Unit	Test Results		Permissi	S	Protocol	
			SW2					
				A*	B*	C*	D*	
21	Nickel as Ni	mg/l	ND [DL- 0.01]	3.0	3.0	-	5.0	APHA 23 <sup>rd</sup> Ed.
22	Arsenic as As	mg/l	ND [DL- 0.01]	0.2	0.2	0.2	0.2	APHA 23 <sup>rd</sup> Ed.
23	Sodium as Na	mg/l	29.40	-	-	-	-	APHA 23 <sup>rd</sup> Ed.
24	Potassium as K	mg/l	2.92		-	-	-	APHA 23rd Ed.
25	Oil & Grease	mg/l	ND	10	20	10	20	IS:3025 (P-39)
26	Total Suspended Solids	mg/l	26	100	600	200	Note-2	IS:3025 (P-17)
27	Dissolved Oxygen as DO	mg/l	6.2	-	-	-	-	IS:3025 (P-38)
28	Biological Oxygen Demand as BOD	mg/l	5	30	350	100	100	IS:3025 (P-44)
29	Chemical Oxygen Demand as COD	mg/l	28	250	-	-	250	IS:3025 (P-58)



Test Report No.:

202503200114

Post Vikrampur, Distt. Angul-759 106

Test Report Date:

01/05/2025

Odisha, India

Sample Particulars

Nature of the Sample

Surface Water

Sample Quantity & Packaging

: 1 Liter, Pet Bottle

Sample Received at Lab

25/04/2025

Test Started on

25/04/2025

Test Completed Method of Sampling 30/04/2025 SOP/B/D-3

Date of Sampling

21/04/2025

Place of Sampling

SW2-River Near Jatia Bridge

**Analysis Report** 

Sr. No.	Parameters	Unit	Test Results		Permissi	Protocol		
			SW2					
				A*	B*	C*	D*	7
1	Total Coliform*	MPN/100ml	669	-	-	-	-	IS 1622

(AUTHORISED SIGNATORY (DHANU BRITA")

Nitya Laboratories



Odisha, India

ULR No .:

TC148142500002507F

Post Vikrampur, Distt. Angul-759 106

Test Report Date:

01/05/2025

Sample Particulars

Nature of the Sample

**Surface Water** 

Sample Quantity & Packaging

1 Liter, Pet Bottle

Sample Received at Lab

25/04/2025

Test Started on

25/04/2025

**Test Completed** 

30/04/2025

Method of Sampling

SOP/B/D-3

Date of Sampling

21/04/2025

Place of Sampling

SW3-River Near PTBS Thermal Area

**Analysis Report** 

Sr. No.	Parameters	Unit	Test Results		Permissil	ole Limits		Protocol
			SW3	A*	B*	C*	D*	
1	pH	-	7.63	5.5-9.0	5.5-9.0	5.5-9.0	5.5-9.0	IS:3025 (P-11)
2	Color	Hazen	<5	Note-1	Note-1	Note-1	Note-1	IS:3025 (P-4)
3	Turbidity	NTU	<1	-	-	-	-	APHA 23 <sup>rd</sup> Ed
4	Temperature	°C	25.5	Note-5	-	-	Note-5	IS:3025 (P-9)
5	Total Dissolved Solids	mg/l	296	-	-	-	-	IS:3025 (P-16
6	Total Hardness as (CaCO <sub>3</sub> )	mg/l	132	-	-	-	1-	IS:3025 (P-21
7	Total Alkalinity as CaCO <sub>3</sub>	mg/l	96	-	-	-	-	IS:3025 (P-23
8	Chlorides as Cl	mg/l	40		*	*	*	IS:3025(P-32
9	Sulphate as SO <sub>4</sub>	mg/l	21.50	*	*	*		APHA 23 <sup>rd</sup> Ed
10	Nitrates as NO <sub>3</sub>	mg/l	0.32	10	-	-	20	IS:3025 (P-34
11	Calcium as Ca	mg/l	28	-	-	-	-	IS:3025 (P-40
12	Magnesium as Mg	mg/l	15.06	-	-	-	-	APHA 23 <sup>rd</sup> Ed
13	Fluoride as F	mg/l	0.14	2.0	15	-	15	IS:3025 (P-60
14	Iron (as Fe)	mg/l	0.21	3.0	3.0	-	3.0	APHA 23 <sup>rd</sup> Ed
15	Manganese as Mn	mg/l	ND [DL- 0.05]	2.0	2.0	-	2.0	IS:3025 (P-59
16	Total Chromium as Cr	mg/l	ND [DL- 0.05]	2.0	2.0	-	2.0	APHA 23 <sup>rd</sup> Ed
17	Lead as Pb	mg/l	ND [DL- 0.005]	0.1	1.0	-	2.0	APHA 23 <sup>rd</sup> Ed
18	Zinc as Zn	mg/l	0.36	5.0	15	-	15	APHA 23 <sup>rd</sup> Ed
19	Cadmium as Cd	mg/l	ND [DL- 0.001]	2.0	1.0	-	2.0	APHA 23 <sup>rd</sup> Ed
20	Copper as Cu	mg/l	ND [DL- 0.05]	3.0	3.0	-	3.0	APHA 23 <sup>rd</sup> Ed



Issued To

M/s Talcher Fertilizers Limited

ULR No.:

TC148142500002507F

Post Vikrampur, Distt. Angul-759 106 Odisha, India

Test Report Date:

01/05/2025

**Analysis Report** 

Sr. No.	Parameters	Unit	Test Results SW3	l A	Permissit	ole Limits	3	Protocol
				A*	B*	C*	D*	
21	Nickel as Ni	mg/l	ND [DL- 0.01]	3.0	3.0	-	5.0	APHA 23 <sup>rd</sup> Ed.
22	Arsenic as As	mg/l	ND [DL- 0.01]	0.2	0.2	0.2	0.2	APHA 23rd Ed
23	Sodium as Na	mg/l	26.30	-	-	-	-	APHA 23rd Ed
24	Potassium as K	mg/l	2.70	-	-	-	-	APHA 23 <sup>rd</sup> Ed
25	Oil & Grease	mg/l	ND	10	20	10	20	IS:3025 (P-39
26	Total Suspended	mg/l	20	100	600	200	Note-2	IS:3025 (P-17
27	Dissolved Oxygen as	mg/l	6.1	-	-		-	IS:3025 (P-38
28	Biological Oxygen Demand as BOD	mg/l	4	30	350	100	100	IS:3025 (P-44
29	Chemical Oxygen Demand as COD	mg/l	20	250	-	-	250	IS:3025 (P-58



M/s Talcher Fertilizers Limited Issued To

Test Report No.:

202503200115

Post Vikrampur, Distt. Angul-759 106 Odisha, India

Test Report Date:

01/05/2025

Sample Particulars

Nature of the Sample

Surface Water

Sample Quantity & Packaging

1 Liter, Pet Bottle

Sample Received at Lab

25/04/2025

Test Started on

25/04/2025

**Test Completed** 

30/04/2025

Method of Sampling

SOP/B/D-3

Date of Sampling

21/04/2025

Place of Sampling

SW3-River Near PTBS Thermal Area

**Analysis Report** 

Sr. Parameters No.	Parameters	rameters Unit	Test Results		Protocol			
		SW3						
				A*	B*	C*	D*	1
1	Total Coliform*	MPN/100ml	542	-	-	-	-	IS 1622

Remark:
ND-Not Detected, DL-Detection Limit, A\*- Inland Surface Water, B\*-Public Sewer, C\*-Land for Irrigation, D\*-Marine Coastal Areas

Nitya Laboratories

